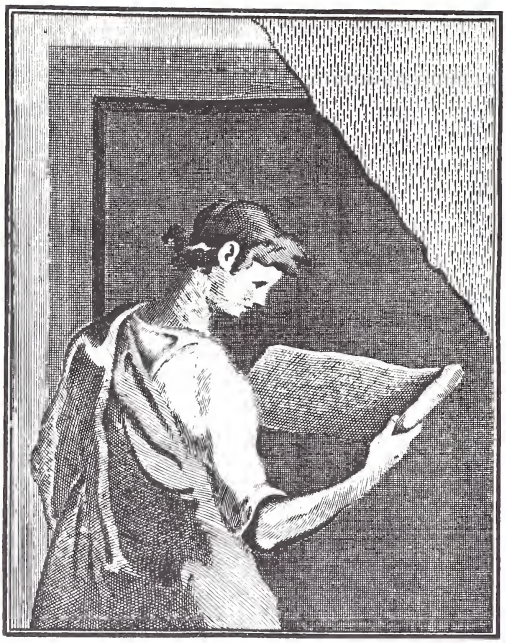
A GUIDE TO PORCELAIN PAINTING

S. T. WHITEFORD.



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A GUIDE

TO

PORCELAIN PAINTING.

BY

SIDNEY T. WHITEFORD.

WITH ILLUSTRATIONS BY THE AUTHOR.

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PREFACE.

WHILST nearly every branch of Pictorial and Decorative art has been made the subject of numerous hand-books, it is believed that no manual of instructions in the art of painting on Pottery and Porcelain has hitherto appeared. Under its present facilitated conditions, the art, whether cultivated for pleasure or profit, will be found to afford a highly interesting occupation. The practice of Ceramic painting does not include the varied manipulative processes employed by artists who work upon canvas or paper. There is comparatively little to be taught, some acquaintance with drawing and colouring being presupposed in the learner. Painting in enamel colour is more particularly recommended. The surface of the glazed ware is always practically identical in texture, and colours of every hue are available.

Painting in under-glaze colours is attended by greater difficulties and much more uncertainty; but it was felt that many persons might wish to decide by actual experience what results can be obtained by each process. Instructions for under-glaze work are therefore given.

The superior value of personal teaching or supervision is not contested; but, to those who cannot obtain such aid, this little work is offered, with confidence that attention to its directions will prevent serious mistakes, and

greatly advance the attainment of success. The difficulties of any art are only overcome by practice, and some failures must be expected; but, to use a homely proverb, "Well begun is half done." The learner may obtain from a book, as well as from a teacher, information, without which first attempts may be hopelessly misdirected. The thanks of the writer are due to several professional painters for assistance freely and courteously given; little, however, is advanced that has not been tested by actual experience.

INTRODUCTORY REMARKS.

PAINTING on Pottery or Porcelain has occasionally been practised with considerable success by amateurs, but obstacles to the cultivation of the art have hitherto been very numerous. Except for those who resided in the neighbourhood of some factory, it was seldom possible to obtain any instruction in the special technical processes, and even the purchase of materials and the necessary transmission of the painted pieces to the kilns were accompanied by vexatious difficulties and delays. Cultivated taste and intelligent interest in the subject of Pottery Decoration being now very widely spread, so many persons have expressed a desire to attempt the practice of the art, that Messrs. Rowney have been induced, with a view to facilitate such endeavours, to prepare complete sets of colours and all requisite materials. They have made arrangements enabling them to supply glazed and unglazed ware, and to have the painted pieces entrusted to them by their customers carefully glazed and fired.

Their ivory tinted ware meets a want that has been felt by many painters on Porcelain, to whom the cold whiteness of ordinary china is disagreeable, and a source of difficulty when quiet harmony of tone is desired.

A

Guide to Porcelain Painting.

CHAPTER I.

Of those persons who observe with admiration the delicate colours or skilfully executed paintings by which the beauty and value of specimens of the potter's art are so greatly enhanced, very few are accurately, if at all informed as to the nature of the materials employed or the methods by which colours are applied and fixed on the ware. Some remarks on the subject and brief notice of the progress of Ceramic decorative art in this country will not be out of place by way of introduction to the formal directions which are the chief objects of these pages.

It must first be observed that the many varieties of ware upon which at different periods the potter's skill has been exercised, are broadly divided into two classes—Pottery and Porcelain. All the early productions of the factories of Europe were varieties of earthenware or pottery. Porcelain was obtained only from the East, and especially from the country which has given to the ware its familiar name—China. Much confusion arises from

misapplication of these distinctive terms. Dr. Lardner, for example, in his interesting sketch of the History of Pottery, referring to the works of Della Robbia (15th century), after rightly describing them as Faïence, or earthenware, immediately speaks of the opaque glaze as "covering the ill-coloured ground of the porcelain;" and again in his notice of Bernard Palissy, he describes a "Bouteille de chasse" of that artist as "a Porcelain flask." It is true that early in the 15th century Continental makers and vendors of earthenware gave to their choicest articles the term "porcelain," probably as being the best substitute they could offer for the coveted Oriental ware. But in these days, when true porcelain is manufactured in all parts of Europe, no such excuse can be offered for the misuse of the name. For earthenware a great variety of clays has at different times been employed, but true "china" or porcelain always consists mainly of a fine white earth, called by the Chinese "kaolin," and obtained in this country chiefly from Cornwall and Devon under the name "China-clay." Earthenware is always opaque, china transparent in proportion to the fineness of its quality. "The transparency of porcelain arises from the clay body becoming saturated with a mass of glassy flux. Under the microscope the two ingredients can be clearly distinguished from each other, the milky mass appearing as a transparent ground mixed with an opaque substance composed of minute globules, arranged in a lineal direction one on the other as articulated threads or little rods, which are interwoven and cross each other in all directions; the want of absolute trans-

parency in the mass being due to the reflection and refraction of light from these crystals." *

Manufactured ware of all kinds in its unglazed state is termed "biscuit."

Glazes vary in their composition, according to the nature of the body to which they are to be applied.

The glaze is applied as an opaque creamy fluid, and becomes glassy and transparent when subjected to the action of heat—technically, "fired"—in the glost, or glazing oven. Occasionally it is laid on with a flat brush, but almost always the biscuit articles are dipped in the fluid glaze, by which process, skilfully managed, they are very rapidly and uniformly covered.

The colours used in pottery decorations are chiefly metallic oxides, and for enamel painting are combined with substances termed fluxes, which unite them with the glaze.

Painting is of two kinds, known as "under-glaze," and "enamel" or "over-glaze." Under-glaze painting is executed on the biscuit with colours specially prepared and known as "refractory." The coloured design is covered with glaze, and fired in an oven raised to great heat. Designs executed by this method are incorporated with the surface, and can perish only with the ware itself; but much uncertainty attends the process, and a great source of difficulty is the different appearance of colours when applied, and after undergoing the action of the glaze and fire. Dark blue, for instance, is when

* Muspratt's "Chemistry of Arts and Manufactures." Article—Pottery. p. 795.

applied, a light violet, or even a dirty brown. Crimson is, in its first state, a pale pink; and other colours show differences of the same kind.

For enamel painting many colours are available which would not endure the heat, and are employed to vitrify the glaze. For this process the colours are fluxed, and the flux, dissolving under moderate heat, unites the colours more or less intimately with the glaze upon which the painting has been executed. If the glaze is very hard, the painting generally has a dry look, and is readily seen to be only superficial; but, by the use of a soft glaze, much of the appearance of under-glaze work can be obtained without its objections. The colours must, however, be well "fired in."

A general tint is imparted to an object by applying coloured glazes to biscuit ware, or by covering glazed ware with colour in powder. The part to be coloured is brushed over with a mixture of turpentine and oils, and the powdered colour is dusted on with cotton-wool, adhering with sufficient firmness to admit of any superfluous particles being lightly brushed off. This method is termed "bossing," and the application of a body of uniform colour is known as "grounding," or "ground-laying."

When it is desired to leave on a coloured ground a white space, for subsequent decoration by painting or gilding, such a space is first covered with a mixture, generally of rose pink with sugar and water. Colour is then "bossed" on, and fixed by firing. Washing in warm water soon removes colour from those parts that have been protected, or, as it is technically termed, "sten-

cilled." For gilding, the gold is prepared with quicksilver and flux, and has the appearance of black dust. It is mixed with oil and turpentine, as colours are, and laid on with a camel hair pencil. After being fired the gold recovers its proper tint, and appears as "dead gold." Brilliancy is imparted, when required, by burnishing.

Patterns upon ware for general use are, when intricate, almost always printed. Impressions from engraved copper plates are taken upon specially prepared paper and divided into sections. The paper bearing the pattern is pressed on the surface of the biscuit ware and rubbed with a boss, or pad of wash-leather, till the coloured design adheres. The absorbent ground retains it, when the paper is afterwards gently rubbed off by means of a soft wet sponge.

The history of all the potteries of Great Britain is involved in considerable obscurity; and, although the manufacture of earthenware was carried on rather extensively in some counties from very early times, such specimens of their productions as still exist show that until the middle of the last century they were rude in form and decoration. It is remarkable for how long a period the arts of design in connection with manufactures were neglected in this country. The truth appears to be that almost down to our own day the British nation has had no confidence in itself as a competitor in the fields of art. Foreign painters, sculptors, musicians and singers long held undisputed sway. In productions which required no alliance with taste, in all work for which strength of will and muscle gave especial fitness, some

degree of pre-eminence was confessedly attained: but whilst popular belief regarded one Briton as a match for many foreign opponents in war, in the peaceful contests of the arts it was assumed that the nations of the Continent alone could hope for laurels. These sentiments, even now far from extinct, were most prevalent until the close of the last century, and did not escape the vigorous satire of the inimitable Hogarth, notably in his well-known caricature entitled "Taste." Upon the potteries, this distrust of native ability acted most injuriously. The potters worked chiefly, if not wholly, for the humble classes; their energies were restricted, and talent remained undeveloped. It is, perhaps, too flattering to speak of Josiah Wedgwood (born 1730) as "the father of the potter's art in England"—"*Vixére fortes ante Agammenona;*" and, as he would have been the first to assert that good work was done by many of his predecessors and contemporaries, he will, nevertheless, always be remembered with high honour as the first who boldly followed a path of independent invention, and forced from the public such recognition that the vaunted productions of the French and German factories gave place to his own, thus, to quote from his epitaph, converting an inconsiderable manufactory into an important part of the national commerce.

For a long period the decoration of earthenware was confined to the enrichment of the surface by ornaments, sometimes incised, at others applied or produced by forming the article in a mould. In the next period colours were imparted by the use of coloured glazes, or by combining variously coloured clays. As the preparation

of metallic colours became better understood, paintings in a bold style were occasionally executed. The well-known Faïence, or earthenware of Italy, frequently displays fine design and colours, but does not appear to have been imitated, or to have influenced pottery decoration in this country. The factories which produced a kind of delft—that is, earthenware covered with a soft enamel—and, perhaps, stoneware, at Lambeth and Fulham, in the 17th century, were probably under Dutch direction. The decorations employed were Dutch or German in character, and sometimes copies, with European feeling infused, from Chinese patterns and designs. It is with the establishment of the manufacture of porcelain in Europe that the era of improved pottery decoration in colours began. Chinese porcelain was first introduced in considerable quantities among the Western nations by the Portuguese, about the year 1518. Its fine qualities excited general admiration; and in the course of time a natural desire arose in the countries of Europe to include among the productions of their factories the highly-prized Oriental ware. The attention of chemists and manufacturers was constantly directed to the subject without leading to the discovery of the true nature of the material. In 1695 a composition of sand, alum, saltpetre, &c., was employed at St. Cloud, near Paris. To the paste thus formed the name *Pâte tendre*, or soft paste porcelain, was given; and in its manufactured state it had much the appearance of true porcelain, though destitute of all the real constituents—being, in fact, not a clay but a kind of glass. In England the so

called porcelain factories at Bow and Chelsea, established at the close of the 17th or beginning of the 18th century, fabricated a similar paste, of which the chief components were—sand from Alum Bay, in the Isle of Wight, a fine clay, and powdered flint glass. Finally, chance gave to Europe what the efforts of learned men had failed to obtain. About 1709, a fine white earth, found in great quantities near Aue, in Saxony, was brought under the notice of an iron-master named Schnorr, by the simple circumstance of its clogging his horse's feet as he rode through the district. He conceived and successfully accomplished a plan to employ this earth as a substitute for the hair powder made from wheat flour, then extensively used. The powdered clay was soon in great demand, being sold under the name of "Schnorr's White Earth." John Böttger, the director of the royal potteries at Dresden, happened one day, whilst his valet was dressing his hair, to take up a packet of the new hair powder, and, struck by its great weight, inquired its name and how it was obtained. Being told that it was "Schnorr's White Earth," he at once conjectured that it might prove a valuable material in the fabrication of fine pottery. Experiment soon proved that he was right, the substance being, in fact, the long-sought "kaolin," or true china-clay. The royal porcelain manufactory established at Meissen, near Dresden, was placed under the direction of Böttger; and thus commenced, in 1715, the manufacture of true porcelain in Europe.

In 1765, kaolin was accidentally discovered in France. Madame Darnet, wife of a surgeon at St. Yreix, near

Limoges, observed in a ravine, not far from the town a white earth which she thought might prove of use as a substitute for soap. A specimen of the earth was forwarded by her husband to a chemist at Bordeaux. He probably suspecting, though uncertain as to its true character, transmitted it to the celebrated Macquer, who at once recognised the true china-clay. After many experiments, and having ascertained that the clay could be procured in abundance at St. Yreix, Macquer established, in 1769, the factory of "hard," or true porcelain, at Sêvres. China-clay appears to have been occasionally used in English factories early in the 18th century, but how it was obtained is uncertain. Probably, small quantities were from time to time imported from China; but, in spite of the doubtful tradition that native kaolin was obtained from Bovey Tracey, in Devon, as early as 1730, the credit of its discovery in this country may be safely given to William Cookworthy, of Plymouth. In 1755, having found near Helstone, in Cornwall, the earth to which he gave the name "caulin," now so well known as china-clay, he commenced investigations, and established at Plymouth, about 1760, the first English factory of true or hard porcelain, taking out a patent for the manufacture in 1768. Four years later, having failed to make the works profitable, Cookworthy sold his patent-right to a merchant named Champion, who transferred the manufactory to Bristol. The Bristol factory proved equally unprofitable, and was closed in 1783, when the patent passed into the hands of the Worcester manufacturers, Messrs. Flight and Barr.

In the course of a few years china-clay came into general use, and porcelain factories were established in various parts of Great Britain. It is unnecessary to pursue their history, as information can be obtained from many sources by those who desire it. (*See* Appendix).

On the character of the decorations painted upon both useful and ornamental ware in the last century a few words may be said. The early productions of the factories of this country, and of the continent, display in their ornamentation remarkable paucity of invention, and, in general, a slavish spirit of imitation. As regards style, the paintings alternated between boldness that was really coarseness, and such extreme finish and petty minuteness as were even more misplaced. The influence of Oriental porcelain was great and constant. At Dresden copies of Chinese forms, designs, colours and gilding, were produced so exactly as to deceive even experienced persons. More often Chinese designs were imitated without any perception of their decorative principles. The *motif*—to borrow a French art term—was followed, but more correct drawing was added, with a loss of all spirit and character. It seems to have been hardly suspected that good decoration was subject to any principles, or was the result of a direct gift, like the highest forms of every art. As long as the painting was well executed and agreeable in itself, it was accepted as a decoration, without regard to its appropriateness or relation to a general result.

As might be expected, progress was most rapid in France. Artists of repute found employment at Sêvres;

and, whatever may be thought of the style of decoration cultivated, it must be admitted that the paintings were executed with much ability. It was better that flowers, &c., should be rendered with too much fidelity to nature, than that nondescript inventions should be accepted as superior in beauty, and the paintings from subjects by Watteau or Boucher must be preferred to bad imitations of misunderstood Chinese art. With these admissions, and adding that gilding was often introduced with much taste, and the skill of the French chemists supplied colours of extreme beauty, the assertion must yet be hazarded that the art of pottery decoration has been almost as little comprehended in France as by other European nations. The attempt to justify this position must be reserved—in the form of general remarks on the principles of decorative art—for the conclusion of this chapter. It is difficult to select any description of ornament or painted subjects as typical of the productions of each European factory. Early pieces from Dresden and Chelsea are so much alike as to be often undistinguishable, except by the nature of the paste. Groups of Cupids, bouquets, and "conversation pieces," as they are termed, were equally popular everywhere. German paintings were as highly finished as those by French artists, but less spirited, and, perhaps, inferior in colouring. In England, as the factories were unassisted by the State, a more mercantile spirit prevailed. Each manufacturer was content to imitate others, or pursue, *ad nauseam*, some decorative theme, however tasteless, that had taken the fancy of the public. The

attention of Wedgwood was chiefly bestowed on the composition of coloured bodies, which he named Basalt, jasper, &c. These were fine clays combined with other chemical substances, and stained by the addition of coloured oxides. His factory did not produce porcelain, and the paintings upon the fine earthenware used as a substitute were of the usual character. The border patterns were occasionally tasteful—in what degree may be estimated by the examples figured in Miss Meteyard's "Life of Wedgwood." The refined forms and moulded decorations which distinguish the celebrated "Wedgwood ware," though truly elegant and perfect in execution, are yet without originality, being, when not direct copies, always strongly influenced by early Etruscan pottery. The attempt, under the altered conditions everywhere accompanying the course of Time, to reproduce in facsimile the creations of another epoch, or differently constituted race, is generally to be regretted, even when made without any intention of fraud. Good art-work is the offspring of national character, and bears the impress of contemporary modes of life and thought. It is scarcely possible that the imitation shall possess the distinctive merits of the original; and it is probably with a feeling that much of Wedgwood's labour was thus misapplied that the eminent author of "The History of Ancient Pottery" classes him among producers of forged Etruscan ware. That he had no intention to deceive is self-evident, for his direct object was to establish the conviction that England could furnish both materials and men for the art of pottery worthy to rank with the best of any

period and every country.* For the selection of classic models for imitation, Wedgwood's partner, Bentley, was probably chiefly responsible, and the choice at least displayed a higher taste than was possessed by other manufacturers.

It is remarkable that, whilst a long list may be made of known artists who worked at Sêvres, of English painters on pottery or porcelain, scarcely a name is remembered but that of the eminent enameller, Bone, who served his apprenticeship in Cookworthy's factory, at Plymouth.

Intimate acquaintance only can give the powers of distinguishing the decorated ware of each factory without the assistance of the recognised factory marks.

The painters were generally men of humble origin, whose occupation was looked upon rather as a trade than an art. They not unfrequently went from one factory to another; and their methods and style were transmitted from one generation to another. Thus, such uniformity of resemblance was secured as was certainly striking, though neither interesting nor agreeable.

The method of transferring to biscuit ware designs printed from copper plates is attributed to Dr. Wall, who established the Worcester porcelain factory in 1751. The discovery was of great value, and capable of more extended and jucidious application than has yet been attempted. In almost all cases the engraved outlines

* The petition of the Staffordshire potters, supported by Wedgwood, declares that in and around Burslem "not one foreigner is employed in, or any material imported from abroad for, any branch of" their trade. Jewitt's "Life of Wedgwood," p. 163.

are too fine and rigid, but perfect identity of pattern is not objectionable for ware which is intended to please by general effect, without attracting close attention. At the same time protest must be made against the prevalent and most unartistic practice of adding to engraved patterns shading, which is objectionable in any form, but especially when rendered by the net-work of harsh lines termed "cross-hatching." Printing, of which several kinds are now in use, should be confined to its right purpose—such rapid repetition as is necessary for cheapness of broadly-outlined conventional patterns for colour printing, or clearly-outlined designs to which colours may be afterwards quickly added by hand.

To what has been said respecting the English pottery decorators should be added that, in spite of Wedgwood's patriotic example, a large number of foreign painters and modellers found employment in this country.* Finally, as showing that the best efforts were not always rewarded by success, reference must be made to the factory on the estate of the Marquis of Rockingham, at Swinton, near Rotherham, in Yorkshire, which produced the ware known as "Rockingham." After a struggling existence under various owners, the works ceased in 1842; yet, both in fabrication and decoration, a position appears to have been attained equal, if not superior, to that of rival establishments. "Two magnificent speci-

* The petition of Mr. Champion, of Bristol, for the extension of his patent-right for the manufacture of porcelain, states that "he has spared no expense in encouraging foreign artificers." Jewitt's "Life of Wedgwood," p. 241. See also Marryatt's "History of Pottery and Porcelain," pp. 281—288.

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From a design by Stothard.

mens exist in Wentworth House, which are deserving of more than common attention, as denoting the degree of advancement of the art in England. One of these pieces is a copy in enamel colours, made on a porcelain tablet, of a painting by Vandyke. . . . The other . . . is believed to be the largest piece of porcelain that has hitherto (1857) been made in this country. It is a scent jar, forty-four inches high, made and fired in one entire piece. The three compartments are painted in enamel colours, from designs by Stothard; the subjects taken from Cervantes."* This employment of designs by an English artist deserves particular notice, and for such a purpose Stothard's art was singularly suitable, his drawings having marked individuality, whilst the subjects are often in character, and nearly always in treatment and feeling extremely decorative. These remarks do not apply in an equal degree to his paintings; of colour he does not appear to have obtained complete mastery.

If this impartial but necessarily brief survey of Ceramic decorative art in the last century compels the conclusion that little praise can be justly bestowed, an equally unfavourable view must be taken of what was done from its close almost to the date of the first "Great Exhibition of the Works of all Nations," which gave such a stimulus to manufacturers allied with the arts. Since that day the general spread of information and art education has created a demand for superior ornamentation, which has been energetically met by the eminent firms whose pro-

* Marryatt's "History of Pottery and Porcelain," 2nd ed., p. 292.

ductions give to this country its present high position in Ceramic art. The writings and influence of intelligent lovers of true decoration have borne good fruit. The schools of art have done much, and the establishment of the South Kensington Museum has been of incalculable benefit, giving to all classes what was before possessed by so few—the power of developing their critical faculties by actual observation and comparison of the art-work of different generations and races. That much may yet be done will scarcely be disputed; more especially to popularise artistic work; but this cannot be hoped for until the national taste becomes more cultivated. Our manufacturers will not produce what the public will not readily buy; and their experience too often justifies their complaint that objects in the best taste are not sufficiently appreciated to be remunerative to the producer, preference being still general for what is merely pretty or eccentric, rather than for what is beautiful. On the relations between producers and buyers nothing can be more just and accurate than what was said by Wedgwood. As a manfacturer and a man of taste, he spoke with knowledge, and his words cannot be too often repeated or too attentively considered. The quotation is from his catalogue, published in 1775. "A competition for cheapness, and not for excellence of workmanship, is the most frequent and certain cause of the rapid decay and entire destruction of arts and manufactures. The desire of selling much in little time, without respect to the taste or quality of the goods, leads manufacturers and merchants to ruin the reputation of the articles

which they manufacture or deal in; and, whilst those who buy for the sake of a fallacious saving prefer mediocrity to excellence, it will be impossible for manufacturers either to improve or keep up the quality of their works. This observation is equally applicable to manufactures and the productions of the fine arts, but the degradation is more fatal to the latter than the former, for, though an ordinary piece of goods for common use is always dearer than the best of the kind, yet an ordinary and tasteless piece of ornament is not only dear at any price, but absolutely useless and ridiculous. All works of art must bear a price in proportion to the skill, the taste, the time, the expense and the risk attending the invention and execution. Those pieces that for these reasons bear the highest price, and which those who are not accustomed to consider the real difficulty and expense of making fine things are apt to call dear, are, when justly estimated, the cheapest articles that can be purchased, and such as are generally attended with much less profit to the artist than those that everybody calls cheap. . . . . The most successful artists know that they can turn out ten ugly and defective things for one that is beautiful and perfect of its kind. Even suppose the artist has the true idea of the kind of beauty at which he aims, how many lame and unsuccessful efforts does he make in his design, and every part of it, before he can please himself? and suppose one piece is well composed and tolerably finished, as in vases and encaustic paintings, for instance, where every succeeding vase and every picture is made, not in a mould, or by a stamp, but separately by the hand, with

the same attention and diligence as the first, how difficult must it be to preserve the beauty of the first model? It is so difficult that, without the constant attention of the master's eye, such variations are frequently made in the form and taste of the work, even while the model is before the workman, as totally to change and degrade the character of the piece. Beautiful forms and composition are not to be made by chance; and they were never made, and never can be made in any kind, at a small expense."*

The peculiar difficulties attending every effort to obtain a wide circulation for articles displaying the best taste in design or decoration can only be fully understood by those who have given much attention to the subject.

A recent writer does not hesitate to say, "Europe is too much hampered by its industrial code and prosaic notions to invent purely æsthetic designs and forms. Her taste is either distorted by trade calculations, chilled by the public indifference to beauty, or coolly set aside by the one-sided common sense theory of political economy. Each workman is made the life-long slave of a single fraction of a mechanical whole, the perfection of which consists in its cheap production and exact resemblance to numberless similar wholes, a system of labour which deadens the mental faculties, power of enjoyment and manual capacity of the worker, and effectually hinders any wholesome development of taste in the buyer."†

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* Jewitt's "Life of Wedgwood," pp. 218 and 219.

† "Art Journal" (1871), p. 262.—"A genuine artistic race."

In the face of recent progress these views may seem too despondent; but it cannot be denied that the tide of improvement has as yet scarcely reached such articles as are moderate in price, and, from their wide diffusion, afford the best indication of the state of national taste, as well as the most powerful means for its instruction and refinement.

On the subject of Ceramic decoration great diversity of opinion exists, and views directly opposed to the judgment of the best authorities are so tenaciously held as to be with difficulty combatted. Many persons who will yield ready assent to certain propositions if applied to other artistic manufactures, refuse to admit that they are of equal force when directed to the fabrication and ornamentation of pottery. Their reasoning, though perhaps, unsuspected, or only half recognised by themselves, appears to be this: The materials at the disposal of the potter and pottery decorator are the same as, or closely resemble, those employed by sculptors and painters, and may, therefore, be used in the same manner and for similar ends. To this the first answer is that, to give durability to the fabricated ware, as to the paintings or other ornaments upon its surface, the action of fire is indispensable—an element always, in some measure, unmanageable and uncertain in its effects. Let it be considered, also, that the forms present constantly varying degrees of convexity and concavity, that the glaze is highly reflective and the material extremely brittle. These are the conditions which regulate the labours of the Ceramic artist, and which render any attempted

rivalry with other forms of pictorial or plastic art a mistaken effort and occasional comparative success only mischievous in result. The characteristics to be sought in good pottery decoration are, first, appropriateness of subject, an agreeable flow of lines and disposition of masses, effective arrangement with fine quality of colour; and lastly, economy of labour, by which is meant, not stint, but wise direction and limitation.

Not many years ago pictorial art became too dignified to condescend to subjects suggested merely by a fanciful and sportive imagination. A picture that did not teach something was a vanity, and the Horatian maxim was quoted: "Segnius irritant animos quæ sunt demissa per aurem, quam quæ sunt oculis subjecta fidelibus"—*i.e.*, "Sight is a more effectual teacher than hearing." At the present day many of our best artists maintain that every picture ought to be a decoration; that the lesson it conveys, and ability with which its story is told—by mastery of expression, light and shade, drawing and arrangement—are matters of secondary importance, the question of real importance being whether it is finely coloured, and has a decorative effect when hung upon the walls of such an apartment as the painter would have selected for its reception. The truth lies, probably, between the two extremes. Neither gravely truthful nor brightly fanciful art can be surrendered; and painting on pottery—quite unsuited to the former—is peculiarly well adapted for the latter, requiring both taste and invention in colouring and design, in the place of fidelity to nature. Excluding serious and painful or repulsive subjects, every

field is open to the painter on pottery. All that is demanded is a conventionalised treatment, varied according to his purpose, either to produce a decorative picture on a flat surface, such as panels of vases, or plâques—*i.e.*, slabs of soft porcelain or earthenware—or to decorate an object having a concave or convex surface. Mr. Ruskin justifies certain eccentricities of the figures in Turner's pictures, observing that when composing a grand landscape we may twist about the forms and proportions of human beings as we do hills, trees, buildings, and other components of the scene. To the decorator, accurate perspective, strict observance of the relative sizes of objects, truth of colour and exactness of form, are considerations of minor importance. His first care is to secure a good general effect, by skilful disposition of light and dark, or by balanced spaces of beautiful colour. At one time he may arrest attention by some startling contrast, at others he will affect the eye with pleasurable sensations by means which cannot be discriminated without attentive examination.

For strictly decorative treatment a clear outline should mark out each important component of the picture, and strong light and shade, as well as all attempts to convey an impression of distance by effects of aërial perspective, should be avoided. Shadows are entirely out of place in pure ornament; but, for decorative pictures, some indulgence may be claimed for their use—not so much to assist in expressive form as to give agreeable variations of colour. Their absence is, perhaps, less felt when the colouring is rich and strong than when the

painting is in a light key; but they must never be so introduced as to break up the general appearance of flatness. It may be added that slight defects in paintings on pottery frequently result from some accident conected with glazing or firing, and can only be expeditiously and effectually concealed by the addition of a little colour introduced as shading.

Archäic forms, or such conventionalised representations of natural objects as are popularly termed Gothic, fail to obtain general acceptance, though delightful when carved in stone and combined with architecture. So, too, the less rude, but quaintly precise treatment known as Mediæval, satisfies only certain minds trained to severe taste. Ornament constructed on mathematical principles—by analysis of the construction of natural forms—though admirable for other purposes, such as work in wood or metal, has only a limited number of admirers when used for Ceramic decoration. It is felt to be monotonous; both eye and mind grow quickly weary of its repetitions; and it ceases to excite interest or even attract notice when its ingenious composition has been traced out. There is a craving for more easily recognised resemblance to nature that will not be gainsaid, and it is possible to meet this want without any sacrifice of the principles of true decoration.

From the Greeks we may learn appropriate treatment of the human form and drapery; from early Chinese, and more recent Japanese art, we gain in the best form illustrations of right adaptation of familiar natural beauties to the purposes of ornamentation.

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The Greeks, working with only red, black, yellow and white, relied on their accurate knowledge of the human figure which they display in perfect beauty, and in every variety of graceful or vigorous action. In their draperies we see grace of line, balanced arrangement of masses, and charming ornamental patterns; whilst the conventionalised folds are beautifully disposed so as to assist or harmonise with the figures as they are in movement or repose.

The Chinese and Japanese decorators, revelling in the delights of bright, yet tender, colour, press earth and air, fire and water, into their service. Nothing is too high or too humble for them; from sea and sky, mountain and forest, they turned with equal affection to wild creatures, furred or feathered, to plants and flowers, and the tiny insects to which they afford food and shelter. The occupations of civil and military life, and even the dwellings of different ranks, with their useful and ornamental contents, are also depicted; but their representations of the human face and form are too grotesque and distinctly national to be instructive examples for Europeans, though introduced with extreme skill, and showing in the draperies finely varied patterns and beautiful harmonies of colour. These remarks apply only to fine examples of early Chinese art, for the artistic spirit departed long since from the nation—perhaps banished by the same destructive influence of European commerce which is already contributing to the evident and rapid deterioration of Japanese art work. It is a strange and disastrous consequence of intercourse between the Eastern and Western

nations, observable in all cases, that the former quickly substitute for artistic enthusiasm the trader's love of gain, and the glory of their national art departs. It is, therefore, only to the best decorated work of China and Japan, produced when extensive commerce with other nations was not thought of, and the genuine art instincts of each race had full play, that attention can safely be given by those who would learn how to unite decorative treatment with fidelity to nature. What is wanted is not a laboured imitation, but the expression in its simplest form of the essential characteristics of each object represented. The construction, grace, and colour of plants and flowers; the strength or lissomness of trees; the form, in action or repose, of beasts, birds and fishes; the set and texture of fur, feathers, and scales; the play of limbs, wings, and fins;—in a word, all distinctive properties are shown by the Japanese artists by a few spirited strokes, of which not one is without purpose. A volume would not suffice to illustrate the high art qualities of their commonest productions; and the study and application of their principles—which must not be confounded with direct imitation of their work—may be confidently recommended to those who love nature, and cannot accept realistic art as decorative.

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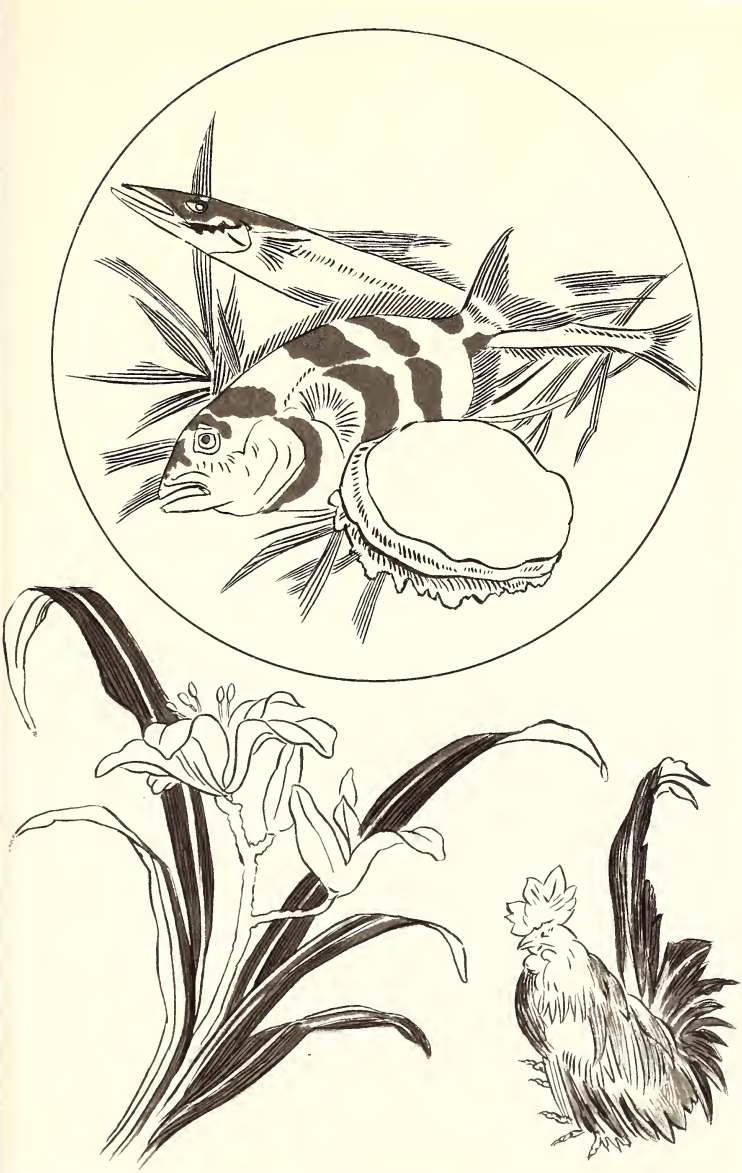

CHAPTER II.

PAINTING ON POTTERY AND PORCELAIN.—MATERIALS.

UNDER-GLAZE COLOURS.—Of these it is only necessary to name such as are in general use. Most of the large factories possess specialities in colours for biscuit painting, adapted to particular glazes and degrees of furnace heat. The same colours are also frequently known by various names. All that are really necessary are—pink, dark blue, light blue, dark green, light green, deep yellow, violet, dark brown, light brown, black.

Light green must be used pure; it is very vivid, and, therefore, only agreeable in small quantities, or in its paler tints. All the other colours may be intermixed for composite hues.

Pink is a powerful colour. If applied thickly it becomes a deep crimson after firing, and the thinnest wash will impart a pink tint. As it is subject to less waste than other colours under the action of the fire, it is often added to give stability to dark composite hues. Thus, for outlines, a good mixture is dark brown with a little pink and dark yellow.

Orange is obtained by striking pink, moderately thick over deep yellow. The result is a better colour than can be produced by mixing.

For purple, mix dark blue and pink.

All the other colours lose much substance when fired; and the most frequent source of disappointment to inexperienced persons is the discovery that they have used too much pink and too little of all other colours. Much, however, depends on the degree of heat that is necessary to vitrify the glaze.

For composite greens, russets, and olives, yellow, black and light brown are mixed in varying proportions with dark green. Only sober greens can be obtained by mixture. Such colouring as is seen in enamel paintings is unattainable with under-glaze colours.

Enamel Colours.—Of these a great number are prepared that are very seldom of use. The list here given includes all that are necessary for subjects of any kind. Others can be obtained if desired; but a larger selection is a source of perplexity rather than an advantage :—

Red.	Yellow.	Dark Green.
Coral Red.	Orange.	Purple.
Carmine.	Dark Brown.	Turquoise.
Rose.	Light Brown.	Black.
Deep Blue.	Purple Brown.	White Enamel.
Light Blue.	Light Green.	

On the use of these a few remarks are necessary.

Neither red nor coral red must be mixed with other colours; and, as they are subject to some change, their use should be deferred, if possible, till the painting has reached such a stage as to require only a final firing.

Carmine and rose. These are varieties of the same pigment, and are used as test colours. In the process of firing they pass through various conditions of tint till they become a fine crimson or clear rose, when the action

of the fire must be at once checked. If over-fired they pass to a dull purple, and are spoilt beyond remedy. If not fired enough (technically, "short-fired") their hue is dull red, and may be brought to the proper tint by renewed firing. It is ordinarily considered that when rose colour has been sufficiently fired all other colours used in the painting are properly burnt in. The development of the carmine or rose tint, therefore, serves as a test by which to regulate the action of heat on the painting.

As the other colours do not change—though they lose substance, and, consequently, depth of tint— they are often subjected to great heat (technically, they are said to be very "hard-fired" or "full-fired"), so as to unite them thoroughly with the glaze. It is often advantageous, when carmine and rose are used pure and in any quantity, to apply them when the piece is to be fired for the last time.

Rose or carmine must not be used for flesh tint at all. The general tint of flesh is best given by red No. 1 or light brown used very pale, and should be fixed by a first firing before shadows are added. For shading touches of blue, orange, and light brown—may be hatched or stippled on—but shadows should be very delicate. For the lips, &c., carmine or red may be used pure, but the two colours must never be mixed.

Dark green combined with yellow gives such useful hues that it is not necessary to use the light green for mixed tints. It is of value pure, having its own peculiar character.

Purple brown, also, should not be mixed with other colours. For composite tints, rose colour, dark brown, and others suffice.

Clear red orange is best obtained by passing carmine over orange. The hue obtained by mixing is very different.

White enamel may be mixed with any of the colours, except the two reds and purple brown. The best course, however, is to apply the enamel first and pass other colours over it. When white enamel has been fixed by firing, reds and all other colours may be passed over it.

Brushes.—The best are the red sable; but, as these are very expensive, they may be used only for outlines, delicate work, and finishing touches. For general purposes, good camel hair brushes in quills will suffice.

Vehicles.—Mixtures of honey, glycerine, &c., have been tried; but refined turpentine and the preparation termed fat-oil are considered by professional painters on pottery indispensable for work upon the glaze. For underglaze, or biscuit painting, the colours may be mixed with gum-water or water colour McGuilp. A drop of oil of spike, cloves, or aniseed, added to colour mixed with turpentine and fat-oil, prevents it from drying too quickly. For those who find the difficulties of work on the porous biscuit too great, a "dressing" has been provided which, brushed thinly over the surface, renders it much less absorbent.

A table-easel, adapted for flat and hollow pieces, is very useful, and a rest of some kind is indispensable to preserve the hand or sleeve from contact with the painting. Both easels and rests have been prepared, similar to those approved by the experience of professional painters.

It will be found convenient to have two palette knives, one more tapering and narrow at the point than the other. The colours are so finely ground that they will

require only rubbing down to smoothness by means of the broad palette knife. The laborious use of the glass slab and muller is unnecessary.

PALETTES.—The palette in general use comprises a number of wells to hold prepared colour, a flat space upon which small quantities of tint can be mixed, and slants for oil and turpentine. Some rim-tiles, or other earthenware slabs, are required. Those who prefer to do so will mix each colour with oil and turpentine when it is wanted; but a great deal of time and trouble will be ultimately saved by rubbing down, at the first, a sufficient quantity of each colour to fill the wells. The one difficulty is, that the right proportion of fat-oil and turpentine must be added, or the contents of the wells will soon become unfit for use. The safest course is to put upon a glazed tile a little fat-oil, then add colour with the palette knife, so as to form a stiff paste. Let the colour and oil be well worked together until the oil will take up no more. Turpentine must be then added, so as to bring the pasty colour to a state resembling syrup or refined treacle. It is then fit to be transferred to the wells, and, if kept covered, will remain fit for use for a long time. The contents of the wells must be examined from time to time, and, if necessary, mixed up again with turpentine. For this purpose an ivory knitting-needle is well suited, as it is easily cleaned.

Other requisites are—a tin brush washer for turpentine (which should stand, when in use, in a plate or saucer), tracing and transfer paper, charcoal, hard black lead pencils, a pair of dividers, plenty of soft rag free from lint, a tracing point, gilt or bone pens, gum water and Indian ink.

CHAPTER III.

PAINTING IN UNDER-GLAZE COLOURS.

For work upon unglazed ware (*bisque*, or biscuit) the pigments may be used either with water and some medium to fix them, or with fat-oil and turpentine, like enamel colours. Each method has its advantages. In the first case they flow readily from the brush, and may be used like ordinary water colours. When dry upon the palette a little water soon softens them; and, if "dressed" with a suitable preparation, the surface of the biscuit is not unlike drawing paper. The difficulties are—(1) the colours dry "dead"—that is, without any gloss, and, consequently, are quite unlike what they become after glazing and firing; (2) they are apt to run, and, when floated on, settle unequally. A mottled appearance results, more colour having been deposited on one part than another. (3) It is not easy to lay on a sufficient body of colour to produce tints of full depth, with allowance for waste produced by the action of the fire. With practice, however, all these obstacles are overcome, and complete work may be executed with one firing only. Some painters begin with water colour and finish with oil. The second painting will not disturb the first; and afterwork in enamel colour upon the glaze is unnecessary, unless to repair very slight defects.

If the painting is executed entirely in colour mixed with oil and turpentine the touches are more precise, a greater body of pigment is deposited, and the glossy nature of the medium gives the colours something of the hue and transparency they will have after being fired.

It must be remembered that the depth of tints after firing depends on the quantity of the colour deposited. A painting executed in colours used with water has a dead surface. The different tints appear nearly uniform in depth or force, but the pigment is much thicker upon some parts than on others. Experience is therefore necessary to decide how thickly the pigment must be applied to produce colours in varying degrees of strength.

Pink and dark blue excepted, all other colours should, as a rule, be applied so thickly as to conceal the surface of the ware, and present, when dry, the appearance of a painting in *tempera*, as seen in good specimens of the art of illuminating. Pink applied thus thickly will become, when fired, a fine crimson. For pink tints, and especially in flesh painting, it can scarcely be used too delicately. The thinnest possible layer of colour will suffice.

Under-glaze colours may be mixed at pleasure to produce any variety of compound tints. For general directions as to their use it will be sufficient to explain the method of executing a painting in one colour on the biscuit; and for decorative work on a white surface, none can be selected so suitable as the dark blue known also as "flowing blue."

A practised draughtsman frequently sketches his subject directly on the biscuit, using either charcoal or

common water colours. Those who have less experience will find it preferable to make a design on paper and draw the outlines firmly and clearly. An exact tracing from these can be transferred to the biscuit with ordinary red or blue transfer paper. Very light pressure with the tracing point will convey a sufficiently clear impression; and it is generally advisable to remove some of the colouring matter from the transfer paper by laying it face downwards on a sheet of rather rough paper and rubbing the back with some smooth implement, such as an ivory knife-handle. Slight corrections may be made in the transferred design with a very hard lead pencil, and rubbing out or cleaning effected with stale bread. Some of the powder colours must be rubbed down with gum and water or water colour McGuilp, using enough water to make it flow easily from the pen or brush.

The outlines may be drawn with a medium-pointed bone or gilt pen, or with a small brush. If a pen is used it must be filled with colour from a brush and the colour stirred frequently. The blue is a powerful colour, and it is impossible to wash out any mark made with it so that no stain shall ultimately appear. The thinnest wash will give a tint when the glazing and firing are completed, and such a thickness of pigment as quite conceals the surface will give a deep blue. Beginners generally apply it too thickly, and it afterwards appears almost black, or shows a sort of filmy irridescence, technically termed "ironing," or becoming "ironed."

For painting, the brush must be fully charged, and the colours, if possible, should be run or floated on, or laid

with broad rapid touches. It is desirable to paint light parts with one wash of thin colour, and dark parts with one wash of thick colour, instead of trying to gain depth by several washes one over the other. Still, colours may be added by small broad touches lightly applied, and the glaze will cause them to flow partially together. A certain amount of irregularity in the depth of the tints, and a blotty look, is not objectionable, and always preferable to a dotted, feeble effect, produced by hatching or stippling. Some skill is required to wash on a ground tint of dark blue over a space of any considerable extent. It may be "bossed" or dabbed on with brushes sold for the purpose. This is best done if the colour is mixed with fat-oil and turpentine; it will not sink or dry so quickly, and can be more easily and deliberately worked.

If the design includes small forms in white on a blue ground, they can be added in white enamel when the piece has been glazed and fired. It is very difficult to leave them untouched when rapidly laying on colour.

Designs combining the under-glaze blue and over-glaze or enamel red are effective. The parts to be coloured red must be left quite white, and the red afterwards applied on the glaze and fixed by the enameling kiln.

Under-glaze paintings, before they are glazed, undergo a process termed "hardening on." They are subjected to moderate heat, which expels all the oil and turpentine and attaches the colour to the ware. This is necessary, because the oil would repel the glaze which is mixed with water.

It is important to observe that if under-glaze colours

are used with oil and turpentine it is not of much consequence how much turpentine is added, so long as the colours can be effectively worked. If, however, too much fat-oil is used, and the colour when dry looks very glossy, thickly applied colour will almost certainly be spoilt by the boiling of the oil in the hardening kiln. It will have a blistered, lumpy look, and can scarcely be repaired, the only remedy being to chip it off, and, having rubbed down remaining roughnesses with pumice-stone, touch on some enamel colour and fire the painting again.

Thin colour is most easily laid on the biscuit if mixed with a good deal of fat-oil, as it will not sink so quickly into the porous surface, and effects of the fire need not be feared. To regulate the quality of the mixed colour for different portions of the work, the brush is dipped in the fat-oil or turpentine contained in the slants of the palette.

All things considered, the use of under-glaze colours with water is most simple, and, with a little experience, perfectly effective.

CHAPTER IV.

PAINTING IN ENAMEL COLOURS.

THE extreme smoothness of the surface is the principal source of difficulty in work upon the glaze, but will soon cease to embarrass if attention is paid to the preparation of the colour. The best method of securing the proper relative proportion of colour, fat-oil, and turpentine, has been already indicated (p. 35), but one or two observations may be made to assist the judgment on this point, right consistency of the pigments being the *sine quâ non* of successful over-glaze work.

Before any attempt to paint, some experimental touches should be made on a piece of glazed ware. If the colour is in a proper state each touch will be smooth and definite in form. The brush will take hold, so to speak, of the surface. If the brush slips and the colour spreads irregularly, too much turpentine has been used, and the remedy is the addition of more colour and a little fat-oil. If, on the other hand, the colour clogs the brush, and is stiff and lumpy, it requires thinning with turpentine. The vehicle must be made to carry as much colouring matter as possible, therefore it must be noticed, in thin touches, if the oil is in excess and its yellowish colour observable, in which case more pigment must be added, thoroughly mixed and thinned with turpentine only.

A thick body of colour, containing too much oil, will probably be injured by boiling in the kiln.

A thin layer of colour cannot be spread evenly if mixed with too much turpentine.

The work must be carried on deliberately. Much annoyance frequently results from a hurried attempt to add a small touch whilst the brush is full of turpentine, and the point only charged with colour. The spirit mingles with and effaces, not only the touch just added, but also adjacent parts of the painting previously executed. To pottery painting the familiar saying is particularly applicable—"The more haste the less speed."

If the well-palettes are used, as recommended (p. 35), the palette-knife used to convey colours from the wells to the tiles must be scrupulously clean; and, when turpentine and oil are added to colour, it is best done, not by pouring from the bottles, but by means of the palette-knife, taking the spirit from the brush-washer and the oil from the slant in the palette.

To draw the first outlines of a design on glazed ware a rather dry brush and India ink are generally used. If required, a tracing can be made and the outlines pricked with a needle, so as to mark out the forms by a close succession of fine holes. The glazed surface having been covered with some adhesive substance, such as honey or oil and turpentine (applied as thinly as possible), the tracing must be held steadily upon it, or fixed with wafers. Powdered charcoal, brushed lightly over the back with a soft leather stump or the fingers, will pass through the holes and mark out the design on the ware

in tolerably clear dotted lines; these must be at once gone over with colours.

Perforated tracings are chiefly useful for patterns, such as borders on which the same forms are several times repeated. A tracing of one section of the design suffices, and does not wear out, as it would if the tracing-point was passed many times over the lines. For pictorial designs the best course is, perhaps, to use a tracing to transfer the principal forms, and sketch in details or slight alterations with India ink.

Colours for outlines may be kept separate on a small palette, and used with glycerine or some water colour medium. The colour mixed with oil and turpentine, afterwards used for painting, will not disturb the outlines drawn with pigment thus prepared. Honey and glycerine, treacle, gum-water and other vehicles, have been used for this purpose. The mixture must not be too thin, lest the fine lines should not have substance enough to allow for waste in firing.

No particular method of painting can be suggested; individual taste will afford the best guide to appropriate execution. Pale flat tints may be produced most easily by "bossing" or dabbing on the colour; and when the picture has been fired a repetition of the process will give any degree of strength desired. Cross-hatching and minute-stippling are laborious and produce a poor effect. As far as possible the work should be carried on by broad touches, laid with a fully-charged flattened brush.

Brushes of different sizes are necessary, and whether for large or fine touches should be charged, not by

dipping, but by drawing them, flattened, through the colour. To prepare the brushes for use dip them in turpentine and draw them through a little oil in the slant, so as to soften and unite the hair up to the quill.

If a brush becomes hard, dip it in turpentine and hold it near a flame—warmth will soon soften it.

Small portions of superfluous colour are easily removed from the painting with the brush-stick, which should be cut to a flat shape at the end. Thin colour, when dry, can be at once softened by breathing on it; and slight corrections, such as cleaning up the edges of any patch of colour, will be most readily and neatly done if the colour is first allowed to dry, then slightly softened by the breath.

After use the brushes must be thoroughly cleansed with turpentine; and, if not intended to be used for some days, may be laid in a little oil or washed with soap and water.

The colours on the palette or painting must be kept free from dust or grit of any kind, for, in spite of the destroying power of the fire, even a hair will draw up the colours in the kiln and cause an annoying disfigurement.

All colours will lose some of their strength when fired; the tints must, therefore, be used darker than they are to appear finally. Colour can, however, be added repeatedly, and the painting fired as often; but it is desirable, both on the grounds of risk and expense, not to rely on more than two or three firings. It is scarcely possible to finish an enamel painting with one firing.

For small touches white enamel may be put on thick at once, but upon large spaces it should be first applied thinly, so as to take a hold on the glaze. When dry, it

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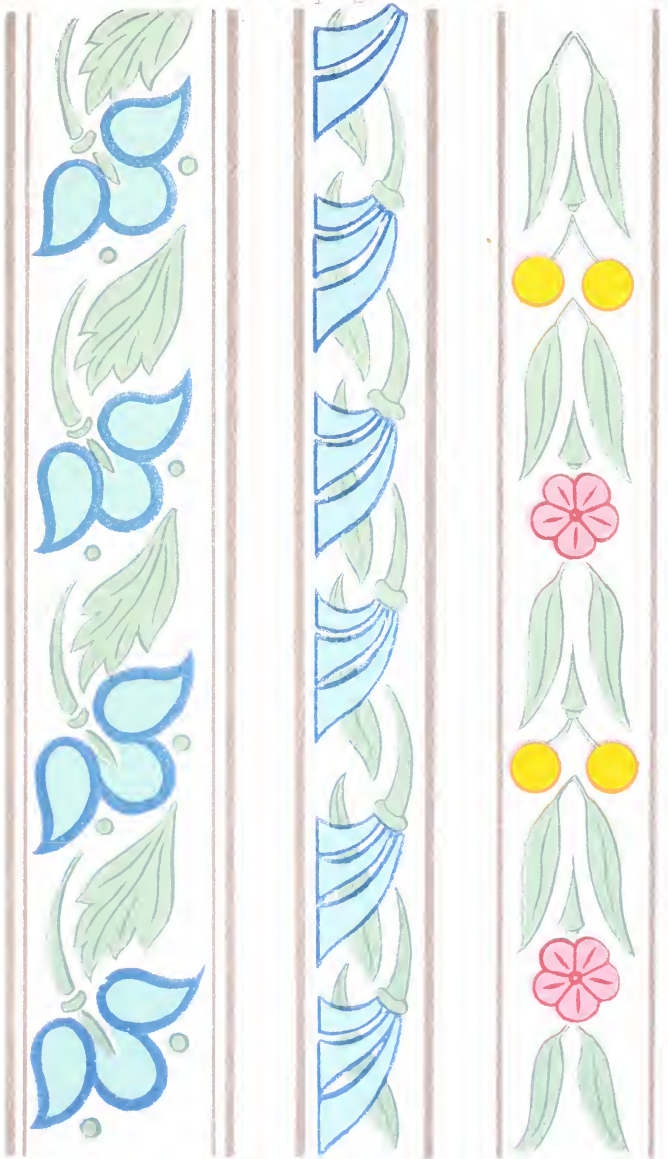


may be covered at once with a thick layer; but the safest course is to defer the addition of the full thickness required until the painting has been once fired.

Turquoise is used precisely in the same manner as white enamel. Both are applied more solidly than other pigments, a considerable body of each being necessary to a proper effect.

White enamel may be employed like ordinary white paint. Colours can be mixed with it, or struck lightly over it when nearly dry.

A patch of colour applied moderately thick may be made to distribute itself more evenly by breathing on it. Pottery painters, when preparing a little colour on the palette for delicate and precise work, always breathe upon it. The intimate union and smooth flow of the colours and medium seems to be assisted by the slight warmth thus imparted.

The bottles containing the colours must be kept covered, and the palette-knife wiped each time it is used to take out a different colour. The presence of a very small quantity of another colour will spoil the contents of a bottle.

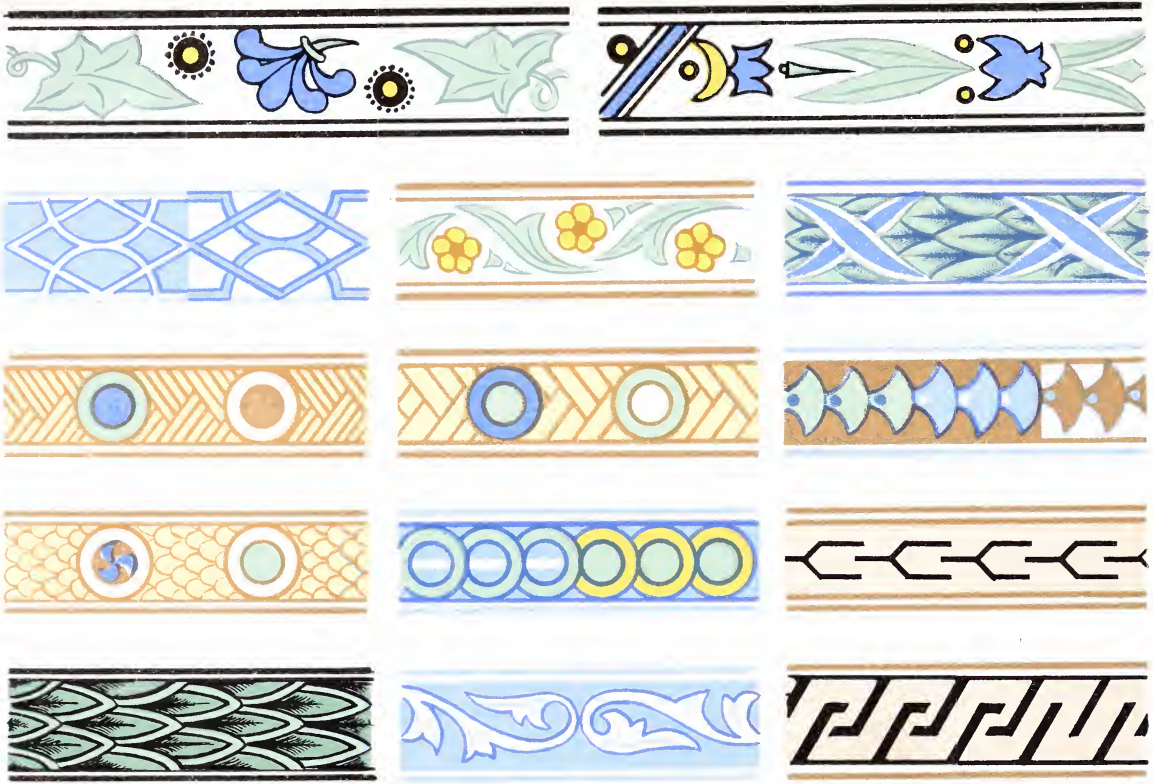
When colour becomes dry and hard upon the palette-knife or palette, as much as possible should be scraped off, and a rag with turpentine used to clean away the rest.

After use all implements should be cleaned before the colour has hardened upon them, if no further use is to be made of them for some time; but colour on the palette will remain serviceable for a day or two if covered close with a saucer.

Circular border lines are generally drawn by means of a "planchet," or wheel—a small revolving table. For artistic work great precision is not required, but the lines may be traced thus: Find the centre, and fix upon it with beeswax a bit of thick card. Upon this the point of one joint of the dividers or compasses will rest firmly, whilst the other joint carries a brush in place of the usual lead pencil.

In designs for pottery a multitude of small detached details should be avoided, as destroying unity of effect. Straggling forms are not agreeable in border designs, which, however intricate, should have a certain compactness, and not draw the eye forcibly from the painting which they enclose. It is generally sufficient to surround a decorative design with one or two lines of varying width and colour. If the border design is broad and elaborate, it requires to be separated from the central subject by a blank space of considerable width. Such a piece as a saucer-shaped plateau, from nine to twelve inches in diameter, is well suited for decoration, of which the border is the principal part, the balance being restored by a small central subject strongly coloured. When nearly the whole available space is filled up by a decorative picture, an intricate border is merely wasted labour.

Beginners will do well not to attempt large paintings at first, and to defer working on the ware until they have prepared on paper an exact coloured design, the outlines of which may be put in firmly with indelible brown ink. Much assistance will be derived from trials of the colours. A small plaque or a common plate should be covered with patches of gradated colours, both pure and in com-



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posite tints produced by mixture. This trial-piece, after being fired, should be always at hand for reference, having below the patches the initial letters of the colours used, or a number to correspond with a written descriptive list.

By removing the painting now and then to some distance from the eye, the general effect will be more readily seen. It is especially necessary to do this when bright colours are used, for the eye quickly becomes fatigued and loses all power of discrimination.

Finally, when a painted piece is to be sent to the kiln, it is advisable to dry out the oil by heating it on a stove, or in a common oven.

For those who cannot originate decorative subjects there can be no lack of material in these days of photography. Modern German woodcuts are often very suggestive, being generally simple in treatment and firmly outlined. Early engravings and book plates also sometimes afford excellent subjects, and there is abundant room for the exercise of taste and ingenuity in the employment of such materials, not by copying, but by adapting them. All the best works on ornament are accessible, in the national libraries, to residents in London and other large towns; but those who can obtain it will find a work entitled "Examples of Ornament" inexpensive, and fully illustrative of the styles of ornament characteristic of various periods and nations.

A list of works relating to pottery and pottery decoration has been added, as an appendix, to these pages, in the hope that some readers may be interested in the history as well as in the practice of Ceramic art.

CONCLUSION.

UNLESS condensed and presented in such a form as to be easily mastered, written instructions seldom receive close attention, and make but a faint or confused impression on the reader's memory. It would be easy to expand the simple directions here comprised within a few pages; but, although an appearance of more importance might thus be given to the work, it is more than probable that its practical usefulness would be diminished. All the technical processes in general use have been described, briefly, yet, it is hoped, so that they may be easily understood and remembered. All the difficulties generally encountered at first are noticed, and such advice added on the best mode of overcoming them as the writer's own practice, and familiarity with the experience of others, has suggested.

That real assistance may be obtained from his pages, and success speedily attend the efforts of those who accept his guidance, is the sincere wish of

THE WRITER.

Stanford Road, Kensington,
1873.

Henderson, Rait, & Fenton, Printers, 73 & 74, Marylebone Lane, London, W.

A

LIST OF WORKS

RELATING TO THE

MANUFACTURE AND DECORATION

OF

POTTERY AND PORCELAIN.

ANTOINE, P. : Œuvres Completes de B. Palissy. Paris, 1844.

BARBET DE JOUY : Les Della Robbia. Paris, 1855.

BIRCH, Dr. S. : History of Ancient Pottery. London, 1873.

BINNS : A Century of Pottery in the city of Worcester. London, 1865.

BRONGNIART : Traitè des Arts Ceramiques. Paris, 1854.

CHAFFERS, W. : Marks and Monograms on Pottery and Porcelain 4th Edition. London, 1874.

CLEUZIOT : De La Poterie Gauloise. Paris, 1872.

DEMMAIN : Guide de Amateur de Faïences et Porcelaines.

FORTNUM, E. D. : Maiolica, &c., in the S. K. M. London, 1873.

GRAESSE : Marks and Monograms. Dresden, 1864.

HAMILTON, Sir. W. : Engraving from Greek Vases. 4 vols. Naples, 1791.

HOFFMAN : Mémoire sur la Porcelaine de Japon. Paris, 1856.

JACQUEMART : Histoirè de la Porcelain. Paris, 1861.

JACQUEMART, A. : Les Merveilles de la Ceramique. Paris, 1868-70.

JACQUEMART, A. : History of Ceramic Art. Translated by Mrs. Bury Palliser. London, 1873.

JEWITT : Notices of English Potteries. *Art Journal.*

OWEN, H. : Two Centuries of Ceramic Art in Bristol. London, 1873.

MARRYATT, J. : History of Pottery and Porcelain. 3rd Edition. London, 1868.

MAYER : History of the Art of Pottery in Liverpool.

MILLINGEN, J. S. : Greek Vases, &c. London, 1822.

QIOT : Histoirè de la Porcelain.

REBOULLEAU : La Peinture sur Porcelain. Paris, 1843.

RIS-PACQUOT : Histoirè des Faïences de Rouen. Amiens, 1870.

SALVETAT : Leçons de Ceramique. Paris, 1857.

"PRIZE MEDALS AWARDED."

EXHIBITION OF ALL NATIONS, 1851, PRIZE MEDAL.
PARIS UNIVERSAL EXHIBITION, 1855, TWO PRIZE MEDALS.
INTERNATIONAL EXHIBITION, 1862, TWO PRIZE MEDALS.
DUBLIN INTERNATIONAL EXHIBITION, 1865, PRIZE MEDAL.
PARIS UNIVERSAL EXHIBITION, 1867, TWO SILVER MEDALS.
LYONS UNIVERSAL EXHIBITION, 1872, SILVER MEDAL.
PHILADELPHIA INTERNATIONAL EXHIBITION, 1876, PRIZE MEDAL.
PARIS UNIVERSAL EXHIBITION, 1878, PRIZE MEDAL.

MESSRS. GEORGE ROWNEY & CO.

HAVE THE PLEASURE TO ANNOUNCE THAT BY THEIR

SYSTEM OF
GRINDING COLOURS BY MACHINERY,

They are enabled to supply Artists' colours in oil, water, or powder, perfectly fine, at the same prices as hitherto charged for colours less finely ground.

Messrs. G. R. & Co. feel assured the OIL COLOURS ground by their improved process will be found to be *finer*, *brighter*, *less oily*, and to *dry quicker* than any others at present manufactured; and that their WATER COLOURS prepared by the same process, will prove to be *finer*, *brighter*, and to *float more evenly without granulation* than any other colours hitherto produced.

They therefore solicit a trial in full confidence of giving satisfaction.

RETAIL DEPARTMENTS:

52, RATHBONE PLACE, and 29, OXFORD STREET, W.

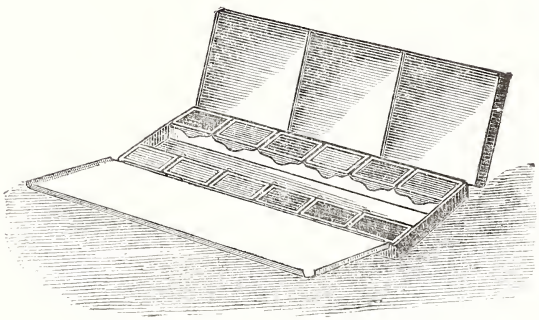
GEORGE ROWNEY & CO.'S
WATER COLOURS,
GROUND BY MACHINERY.

LIST OF WATER COLOURS.		Whole Cakes, Moist Pans, or Tubes. Each s. d.	Half Cakes or Half Pans. Each s. d.	Quarter Cakes. Each s. d.
Ultramarine		21 0	10 6	5 3
Deep Rose	Purple Madder	5 0	2 6	1 3
Extract Madder Carmine	Smalt			
	Ultra Ash			
Aureolin	Green Oxide of Chromium	3 0	1 6	0 9
Burnt Carmine	Intense Blue			
Carmine	Madder Lake			
Cadmium, Pale	Mars Orange			
Cadmium, Yellow	Pink Madder			
Cadmium, Orange	Pure Scarlet			
Cadmium, Orange Deep	Rose Madder			
Dahlia Carmine				
Gallstone				
Azure Blue	Lemon Yellow	2 0	1 0	0 6
Cobalt	Veronese Green			
French Ultramarine	Violet Carmine			
Black Lead	Mauve	1 6	0 9	0 5
Brown Madder	Mars Yellow			
Chinese Orange	Orange Vermilion			
Cœruleum	Purple Lake			
Crimson Lake	Scarlet Vermilion			
Indian Lake	Scarlet Lake			
Indian Yellow	Sepia			
Italian Ultra	Roman Sepia			
Magenta	Warm Sepia			
Antwerp Blue	King's Yellow	1 0	0 6	0 3
Bistre	Lamp Black			
Blue Black	Light Red			
Blue Verditer	Naples Yellow			
Brown Ochre	Neutral Tint			
Brown Pink	Olive Green			
Burnt Sienna	Orange Orpiment			
Burnt Umber	Payne's Grey			
Chinese White	Permanent Blue			
Chrome 1, Lemon	Permanent White			
Chrome 2, Middle	Prussian Blue			
Chrome 3, Orange	Prussian Green			
Chrome 4, Deep	Purple			
Cologne Earth	Raw Sienna			
Dragon's Blood	Raw Umber			
Emerald Green	Red Lead			
Flake White	Roman Ochre			
Gamboge	Sap Green			
Hooker's Green, 1	Terra Vert			
Hooker's Green, 2	Vandyke Brown			
Indian Red	Venetian Red			
Indigo	Verdigris			
Italian Ochre	Vermilion			
Italian Pink	Yellow Lake			
Ivory Black	Yellow Ochre			

GEO. ROWNEY & CO.'S

JAPANNED TIN SKETCHING BOXES,

FILLED WITH MOIST COLOURS.



	£	s.	d.
1-Cake Box	0	4	8
Sepia.			
2-Cake Box	0	5	8
Sepia and Chinese White.			
3-Cake Box	0	7	0
Raw Sienna, Indigo, and Sepia.			
4-Cake Box	0	8	3
Raw Sienna, Sepia, Indigo, and Chinese White.			
LANDSCAPE.			
6-Cake Box	0	10	9
Gamboge, Yellow Ochre, Light Red, Crimson Lake, Vandyke Brown, and Prussian Blue.			
LANDSCAPE.			
10-Cake Box	0	19	0
Gamboge, Roman Ochre, ($\frac{1}{2}$) Lemon Yellow, ($\frac{1}{2}$) Chinese Orange, ($\frac{1}{2}$) Indian Red, ($\frac{1}{2}$) Vermilion, Brown Pink, Sepia, Cœruleum, French Ultramarine, Prussian Blue, and Veronese Green.			
LANDSCAPE.			
12-Cake Box	1	4	0
Gamboge, Raw Sienna, ($\frac{1}{2}$) Lemon Yellow, ($\frac{1}{2}$) Pale Cadmium, ($\frac{1}{2}$) Orange Cadmium, ($\frac{1}{2}$) Mars Orange, ($\frac{1}{2}$) Indian Red, ($\frac{1}{2}$) Vermilion, Crimson Lake, Madder Brown, Sepia, Lamp Black, Cobalt, Prussian Blue, and Olive Green.			

LANDSCAPE AND FIGURE. £ s. d.

12-Cake Box 1 5 6

Yellow Ochre, (½) Lemon Yellow, (½) Orange Cadmium, Mars Yellow, Light Red, (½) Scarlet Vermilion, (½) Rose Madder, (½) Carmine, (½) Purple Lake, Vandyke Brown, Madder Brown, Cœruleum, French Ultramarine, (½) Indigo, (½) Emerald Green, and Veronese Green.

LANDSCAPE AND FIGURE.

16-Cake Box 1 15 0

Raw Sienna, Indian Yellow, (½) Lemon Yellow, (½) Italian Pink, (½) Cadmium Yellow, (½) Orange Cadmium, Brown Ochre, Burnt Sienna, Scarlet Vermilion, Madder Lake, Indian Lake, Raw Umber, Vandyke Brown, Cobalt, French Ultramarine, Indigo, (½) Ultramarine Ash, (½) Emerald Green, and Green Oxide of Chromium.

LANDSCAPE AND FIGURE.

18-Cake Box 1 15 0

Gamboge, Yellow Ochre, Roman Ochre, (½) Aureolin, (½) Italian Pink, Indian Yellow, (½) Cadmium Yellow, (½) Orange Cadmium, Brown Ochre, Light Red, (½) Indian Red, (½) Scarlet Vermilion, Rose Madder, (½) Indian Lake, (½) Lamp Black, Raw Umber, Sepia, Cobalt, French Ultramarine, Prussian Blue, (½) Emerald Green, (½) Olive Green, and Veronese Green.

LANDSCAPE, FIGURE, &c.

20-Cake Box 2 1 6

Gamboge, Yellow Ochre, Roman Ochre, (½) Lemon Yellow, (½) Aureolin, Indian Yellow, (½) Cadmium Yellow, (½) Orange Cadmium, Light Red, (½) Indian Red, (½) Vermilion, (½) Scarlet Vermilion, (½) Carmine, Rose Madder, Madder Brown, Brown Ochre, Vandyke Brown, Sepia, Cobalt, French Ultramarine, Indigo, (½) Emerald Green, (½) Olive Green, (½) Cœruleum, (½) Ultramarine Ash, and Veronese Green.

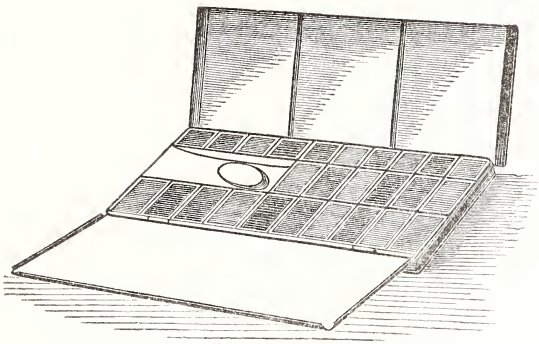
LANDSCAPE, FIGURE, &c.

22-Cake Box 2 7 9

Gamboge, Yellow Ochre, Raw Sienna, (½) Lemon Yellow, (½) Aureolin, Indian Yellow, (½) Cadmium Yellow, (½) Orange Cadmium, Light Red, (½) Indian Red, (½) Vermilion, (½) Orange Vermilion, (½) Carmine, Rose Madder, Madder Brown, Brown Ochre, Burnt Umber, Sepia, Cobalt, French Ultramarine, Prussian Blue, (½) Emerald Green, (½) Lamp Black, (½) Cœruleum, (½) Ultramarine Ash, (½) Smalt, (½) Purple Madder, Olive Green, and Veronese Green.

WATER COLOUR PAINTER'S BOX,

16 CAKES AND 10 HALF CAKES.



E. DUNCAN'S ARRANGEMENT (Sea and Landscape).

WHOLE PANS.

Gamboge, Indian Yellow, Yellow Ochre, Roman Ochre, Raw Sienna, Burnt Sienna, Venetian Red, Chinese Orange, Madder Brown, Vandyke Brown, Cœruleum, Cobalt, Prussian Blue, Indigo, Lamp Black, and Sepia.

HALF PANS.

Cadmium Yellow, Cadmium Orange, Scarlet Vermilion, Carmine, Rose Madder, Purple Lake, Extract of Madder Carmine, Violet Carmine, Ultramarine Ash, and Veronese Green.

Price per box, £2 5s. 6d.

F. TAYLOR'S ARRANGEMENT (Figure, Animal, & Landscape).

WHOLE PANS.

Gamboge, Lemon Yellow, Indian Yellow, Raw Sienna, Brown Pink, Veronese Green, Indigo, French Ultramarine, Cobalt, Cœruleum, Chinese Orange, Burnt Sienna, Indian Red, Scarlet Vermilion, Madder Brown, and Sepia.

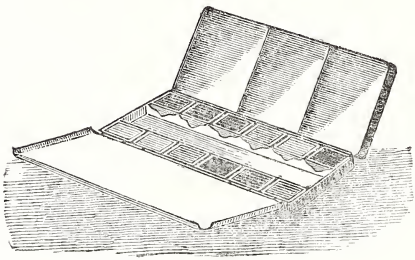
HALF PANS.

Cadmium Yellow, Orange Cadmium, Yellow Ochre, Olive Green, Vandyke Brown, Purple Madder, Purple Lake, Rose Madder, and Ultramarine Ash.

Price per box, £2 6s. 6d.

JAPANNED TIN SKETCH BOXES,

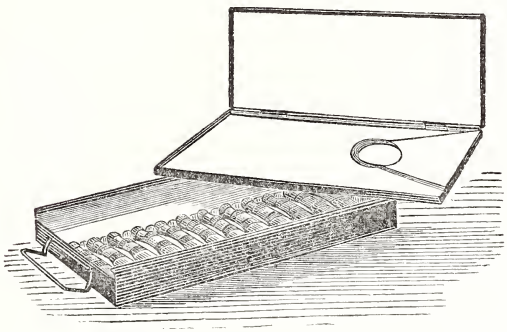
FILLED WITH HALF-PANS OF MOIST COLOURS.



	£	s.	d.
3-Half-Cake Box	0	5	6
Gamboge, Light Red, and Cobalt.			
8-Half-Cake Box	0	10	3
Gamboge, Yellow Ochre, Light Red, Rose Madder, Vandyke Brown, Cobalt, Prussian Blue, and Veronese Green.			
12-Half-Cake Box	0	13	9
Gamboge, Roman Ochre, Lemon Yellow, Chinese Orange, Indian Red, Vermilion, Brown Pink, Sepia, Cœruleum, French Ultramarine, Prussian Blue, and Veronese Green.			
14-Half-Cake Box	0	16	9
Gamboge, Raw Sienna, Lemon Yellow, Cadmium Yellow, Mars Orange, Indian Red, Vermilion, Crimson Lake, Madder Brown, Sepia, Lamp Black, Cobalt, Indigo, and Olive Green.			
16-Half-Cake Box	1	0	3
Yellow Ochre, Lemon Yellow, Orange Cadmium, Mars Yellow, Light Red, Scarlet Vermilion, Rose Madder, Carmine, Purple Lake, Vandyke Brown, Madder Brown, Cœruleum, French Ultramarine, Prussian Blue, Emerald Green, and Veronese Green.			
18-Half-Cake Box	1	1	0
Gamboge, Yellow Ochre, Lemon Yellow, Cadmium Pale, Orange Cadmium, Chinese Orange, Light Red, Vermilion, Orange Vermilion, Crimson Lake, Rose Madder, Sepia, Brown Pink, Cobalt, Indigo, Cœruleum, Payne's Grey, and Terra Vert.			
20-Half-Cake Box	1	4	0
Gamboge, Yellow Ochre, Aureolin, Cadmium Pale, Orange Cadmium, Chinese Orange, Light Red, Vermilion, Orange Vermilion, Crimson Lake, Rose Madder, Violet Carmine, Sepia, Brown Pink, Payne's Grey, Cobalt, Prussian Blue, Cœruleum, Emerald Green, and Veronese Green.			

JAPANNED TIN BOXES OF MOIST WATER COLOURS,

IN COMPRESSIBLE TUBES WITH FOLDING PALETTE.



	£	s.	d.
12-Moist Tube Box	1	5	0

Gamboge, Roman Ochre, Lemon Yellow, Chinese White, Indian Red, Vermilion, Brown Pink, Sepia, Cœruleum, French Ultramarine, Prussian Blue, and Veronese Green.

15-Moist Tube Box	1	14	3

Gamboge, Raw Sienna, Aureolin, Cadmium Yellow, Mars Orange, Indian Red, Vermilion, Crimson Lake, Madder Brown, Sepia, Lamp Black, Cobalt, Prussian Blue, Olive Green, and Chinese White.

20-Moist Tube Box	2	5	3

Gamboge, Yellow Ochre, Aureolin, Cadmium Pale, Orange Cadmium, Chinese Orange, Chinese White, Light Red, Vermilion, Orange Vermilion, Crimson Lake, Rose Madder, Violet Carmine, Sepia, Brown Pink, Cobalt, Prussian Blue, Cœruleum, Emerald Green, and Veronese Green.

24-Moist Tube Box	2	10	6

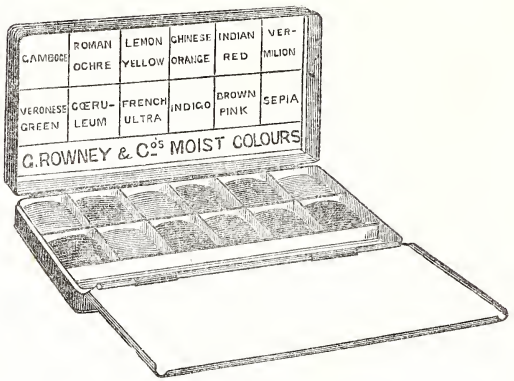
Gamboge, Yellow Ochre, Roman Ochre, Aureolin, Indian Yellow, Orange Cadmium, Light Red, Indian Red, Vermilion, Scarlet Vermilion, Carmine, Rose Madder, Madder Brown, Brown Ochre, Vandyke Brown, Sepia, Cobalt, French Ultramarine, Prussian Blue, Emerald Green, Olive Green, Cœruleum, Veronese Green, and Chinese White.

30-Moist Tube Box	3	7	8

Gamboge, Yellow Ochre, Naples Yellow, Roman Ochre, Lemon Yellow, Indian Yellow, Orange Cadmium, Aureolin, Light Red, Indian Red, Vermilion, Scarlet Vermilion, Carmine, Rose Madder, Madder Brown, Brown Ochre, Vandyke Brown, Warm Sepia, Brown Pink, Cobalt, French Ultramarine, Prussian Blue, Neutral Tint, Ivory Black, Emerald Green, Veronese Green, Olive Green, Chinese White, Cœruleum, and Ultramarine Ash.

MINIATURE SIZE JAPANNED SKETCH BOXES,

FILLED WITH QUARTER-CAKE QUANTITIES OF MOIST COLOURS.



This Illustration shews the Box, with Twelve Colours, two-thirds its size.

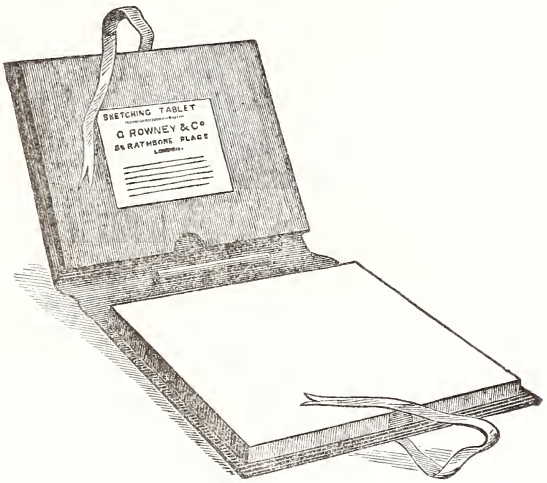
---

	s.	d.
4-Quarter-Cake Box	4	0
Raw Sienna, Light Red, Sepia, and Cobalt.		
8-Quarter-Cake Box	6	0
Raw Sienna, Yellow Ochre, Light Red, Rose Madder, Vandyke Brown, Cobalt, Prussian Blue, and Veronese Green.		
12-Quarter-Cake Box	8	3
Gamboge, Roman Ochre, Lemon Yellow, Chinese Orange, Indian Red, Vermilion, Brown Pink, Sepia, Cœruleum, French Ultramarine, Indigo, and Veronese Green.		
16-Quarter-Cake Box	12	0
Yellow Ochre, Aureolin, Orange Cadmium, Mars Yellow, Light Red, Scarlet Vermilion, Rose Madder, Carmine, Purple Lake, Vandyke Brown, Madder Brown, Cœruleum, French Ultramarine, Prussian Blue, Emerald Green, and Veronese Green.		

PALETTE BOXES.

For holding a small supply of Colours for a few days' use; the wells to be filled from the tubes	5	9
Ditto, ditto, with double row of wells	8	6

SOLID SKETCH BLOCKS & TABLETS.



The Blocks consist of a number of sheets of paper, compressed so as to form a solid mass, each sheet of which is to be separated by inserting a knife underneath the uppermost one, and passing it round the edge.

The Tablet is a block fixed in a case, with a pocket for carrying the sketches and place for pencil.

MADE OF WHATMAN'S OR HODGKINSON'S THICK PAPERS.

32 SURFACES.	SIZE.	SOLID BLOCKS.	SOLID TABLETS.
		s. d.	s. d.
Imperial 32mo - -	5 inches by $3\frac{1}{2}$	Each 1 3	Each 2 6
Royal 16mo - - -	$5\frac{1}{2}$,, $4\frac{1}{2}$	1 9	3 0
Imperial 16mo - -	7 ,, 5	2 6	3 9
Royal 8vo - - -	9 ,, $5\frac{1}{2}$	3 0	4 3
Imperial 8vo - - -	10 ,, 7	3 9	5 6
Imperial 6mo - -	14 ,, 7	4 9	7 6
Royal 4to - - -	$11\frac{1}{2}$,, 9	4 9	7 6
Imperial 4to - -	14 ,, 10	7 6	10 6
Imperial 3mo - -	20 ,, $9\frac{1}{2}$	9 9	15 3
Half Royal - -	18 ,, $11\frac{1}{2}$	10 3	16 3
Half Imperial - -	20 ,, 14	14 3	20 3

SOLID SKETCH BLOCKS AND TABLETS.

MADE OF WHATMAN'S OR HODGKINSON'S EXTRA THICK PAPERS.

82 SURFACES.	SIZE.	SOLID BLOCKS.	SOLID TABLETS.
		s. d.	s. d.
Imperial 16mo - -	7 inches by 5	Each 3 0	Each 4 3
Double Elephant 16mo -	9 ,, 6	4 6	6 0
Imperial 8vo - -	10 ,, 7	5 3	6 9
Imperial 6mo - -	14 ,, 7	7 0	9 9
Double Elephant 8vo -	12 ,, 9	8 3	11 3
Imperial 4to - -	14 ,, 10	10 0	13 0
Imperial 3mo - -	20 ,, 9½	13 0	18 9
Double Elephant 4to -	18 ,, 12	16 6	22 0
Half Imperial - -	20 ,, 14	19 9	25 9

SOLID SKETCH BLOCKS AND TABLETS.

MADE OF THICK MACHINE MADE TINTED CRAYON PAPERS.

82 SURFACES.	SIZE.	SOLID BLOCKS.	SOLID TABLETS.
		s. d.	s. d.
Imperial 32mo - -	5 inches by 3½	Each 1 0	Each 2 3
Royal 16mo - -	5½ ,, 4½	1 3	2 6
Imperial 16mo - -	7 ,, 5	1 6	2 9
Royal 8vo - - -	9 ,, 5½	2 3	3 6
Imperial 8vo - -	10 ,, 7	2 6	4 3
Imperial 6mo - -	14 ,, 7	3 6	6 0
Royal 4to - - -	11½ ,, 9	3 9	6 3
Imperial 4to - -	14 ,, 10	4 6	7 6
Imperial 3mo - -	20 ,, 9½	7 3	12 9
Half Royal - -	18 ,, 11½	7 9	13 6
Half Imperial - -	20 ,, 14	9 0	15 0

SKETCHING PORTFOLIOS,

WITH JAPANNED TIN FRAME FOR SECURING THE PAPER IN USE, AND WITH POCKET TO CONTAIN THE SKETCHES & A SUPPLY OF PAPER.

	SIZE.	s. d.
Imperial 8vo - - - -	11 inches by 7 -	Each 5 3
Royal 4to - - - -	12 ,, 9 -	6 0
Imperial 4to - - - -	15 ,, 11 -	7 6
Half Royal - - - -	19 ,, 12 -	11 3
Double Elephant 4to - -	18 ,, 12½ -	12 0
Half Imperial - - - -	22 ,, 15 -	15 0

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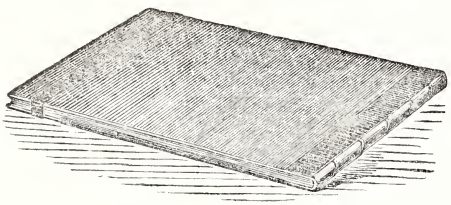
MADE OF WHATMAN'S HAND-MADE DRAWING PAPERS.

Half-bound, Cloth Sides, Roan Backs, Gilt. Forty Leaves.

TO FASTEN WITH ELASTIC BAND.



	SIZE.			s.	d.
Imperial 32mo	5 inches by $3\frac{1}{2}$	Each		1	6
Imperial 16mo	7 ,, 5			2	3
Demy 8vo	7 ,, $4\frac{1}{2}$			1	9
Medium 8vo	8 ,, 5			2	3
Royal 8vo	9 ,, $5\frac{1}{2}$			2	9
Imperial 8vo	10 ,, 7			3	9
Demy 4to	$9\frac{1}{2}$,, 7			3	0
Medium 4to	$10\frac{1}{2}$,, 8			3	9
Royal 4to	$11\frac{1}{2}$,, 9			4	6
Super-Royal 4to	13 ,, 9			5	0
Imperial 4to	$14\frac{1}{2}$,, 10			6	6

The above are made of "Hot-pressed" paper, unless "not" is specially ordered.

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MADE OF HOLLINGWORTH'S FINE DRAWING PAPERS.

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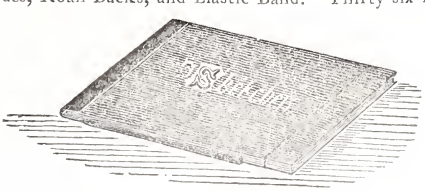

SIZE.

			s.	d.
Royal 16mo	$5\frac{1}{2}$ inches by $4\frac{1}{2}$	Each	1	0
Royal 8vo	9 ,, $5\frac{1}{2}$		1	6

BLACK LEAD PENCILS.

PRIZE MEDAL AWARDED INTERNATIONAL EXHIBITION, 1862.

GEORGE ROWNEY & CO.'S
IMPROVED DRAWING PENCILS.

Neatly got up in Polished Cedar, in order to prevent the lead dust adhering to the Pencil, and consequently soiling the fingers.

H	Hard for Sketching	HB	Hard and Black
HH	Harder for Outlines	B	Black for Shading
HHH	Very Hard for Architects	BB	Softer and very Black
HHHH	Extra Hard for Engineers	F	Firm for Ordinary Drawing

2s. per Dozen.

EXTRA LETTERS, MOST CAREFULLY PREPARED.

EHB	Extra Hard and Black	4s. per dozen.
DEHB	Ditto, ditto, extra Thick Lead	
FF	Very Firm and Double Thick Lead	
BBB	Softer and Very Black, Double Thick Lead	

BBBB Extra Soft and Black, 6d. each, or 5s. 6d. per dozen.

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THE IMPROVED PENCILS.

MAY BE HAD IN SETS, AS FOLLOWS:

3	Pencils in Roan Case	each	1	0
4	Ditto in ditto	,,	1	3
7	Ditto in ditto	,,	2	3
7	Ditto in ditto, divided and lettered	,,	3	0
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Messrs. ROWNEY & Co. have every confidence in recommending their IMPROVED DRAWING PENCILS to the notice of the Profession, their moderate price and superior quality being sufficient to give them a decided preference with the public.

ROWNEY'S EVER-POINTED DRAWING PENCILS.

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Each degree is polished in a different colour, 1s. each.

Leads only, 2s. per dozen.

Cases containing Four Pencils, 4s. per Case.

The fault of all Pencils of this description has been hitherto their inability to resist the pressure necessary in drawing. The above Pencils are free from this defect, and are exceedingly light in the hand.

PENCIL MANUFACTURERS TO HER MAJESTY'S STATIONERY OFFICES AND SCHOOLS OF DESIGN.

GEO. ROWNEY & CO.'S

PENNY DRAWING PENCILS.

With the view of enabling the working classes to avail themselves of the advantages presented by the many Schools of Design and Classes recently opened for the instruction of Drawing in its various branches, and to supply themselves with good materials at a low price, Messrs. R. & Co. have devoted their attention to the production of a Penny Drawing Pencil, of a quality sufficiently good for general purposes. The Pencils are manufactured of Four Degrees—Hard, Middle, Soft, and very Soft, in polished and coloured Cedar.

H	Hard, in plain Cedar, polished	1s. per doz.
HB	Middle, coloured red, ,, ...	
B	Soft, coloured dark red, ,, ...	
BB	Very Soft, coloured black ,, ...	

Each Pencil is stamped in Silver, thus—"GEORGE ROWNEY & CO."

Cases, containing Three Pencils, 6d. each.

G. ROWNEY & CO.'S HALFPENNY PENCIL.

In Polished and Stained Cedar, stamped in Silver, thus—
"G. ROWNEY & CO." .. .. 6d. per dozen.

CUMBERLAND BLACK LEAD DRAWING PENCILS,

MANUFACTURED BY

GEORGE ROWNEY & COMPANY,

OF THE GENUINE PLUMBAGO, OR PATENT COMPRESSED LEAD, OF THE

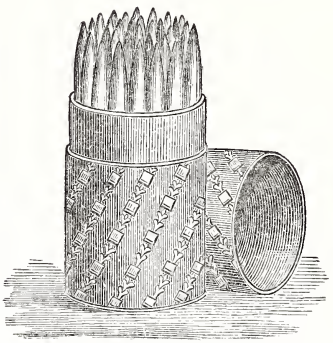
FOLLOWING DEGREES:

H	Hard	3s. per doz.
HH	Harder	
HHH	Very Hard	
HHHH	Extra Hard	
HB	Hard and Black	
F	Middling Degree	
B	Black for Shading	
BB	Very Black for ditto	
BBB	Soft Broad Lead	6s. per doz.
EHB	Extra Hard and Black	
FF	Very Fine	
DEHB	.. ..	
BBBB	.. ..	

GEORGE ROWNEY & CO.'S
COLOURED CRAYONS, &c.,

MANUFACTURED OF THE FINEST MATERIALS.

POINTED CRAYONS.



These are hard Crayons which work with great evenness and freedom.

		s.	d.
Boxes containing 12	per Box	1	0
,, 18	,,	1	6
,, 24	,,	2	0
,, 36	,,	3	0

IMPROVED CRAYONS.

These are similar to the Swiss, rather harder, but of medium quality and smaller.

Boxes containing 36	per Box	4	6
,, 72	,,	9	0
,, 144	,,	18	0
Vermilion, Lake, or Cobalt, separately	per dozen Crayons	4	6

SWISS CRAYONS.

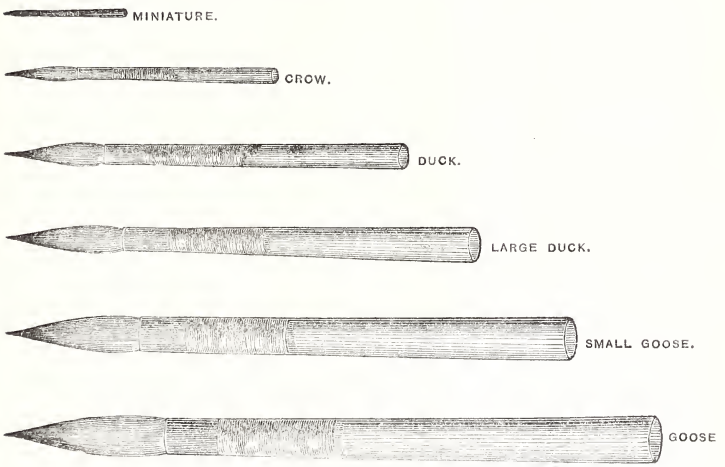
These are very soft, and the material most in use for Crayon Drawings.
They are sold in glass tubes, which prevent the colours mingling.

Boxes containing 12	each	0	6	0
,, 24	,,	0	10	6
,, 36	,,	0	15	0
,, 72	,,	1	10	0
,, 144	,,	3	0	0

GEORGE ROWNEY & CO.'S

BRUSHES FOR WATER-COLOUR DRAWING.

SABLE HAIR PENCILS.



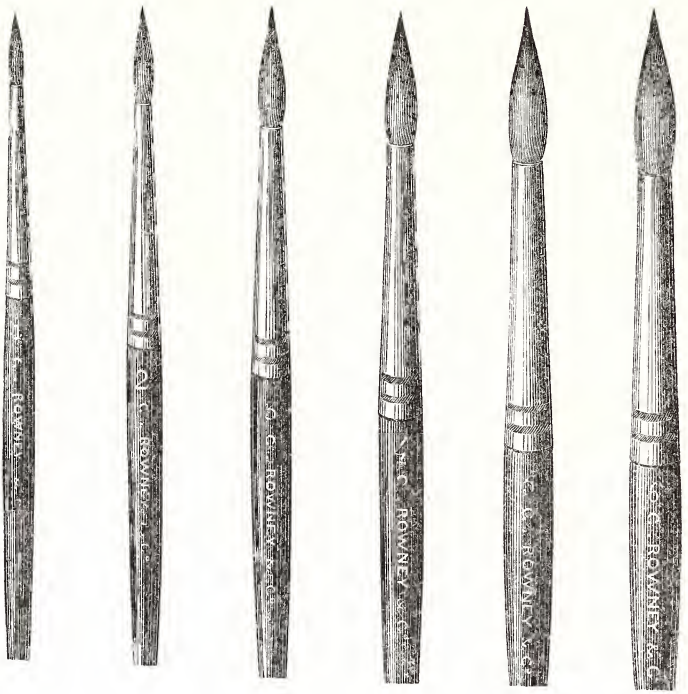
DOME-POINTED, TIED WITH GOLD WIRE.

		RED.		BROWN.	
		s.	d.	s.	d.
Large eagle	each			18	9
Small eagle	,,			15	0
Extra large swan	,,	7	6	7	6
Large swan	,,	6	0	6	0
Middle swan	,,	5	0	4	6
Small swan	,,	3	9	3	0
Extra small swan	,,	3	0	2	3
Extra large goose	,,	2	0	1	6
Large goose	,,	1	8	1	3
Goose	,,	1	3	1	0
Small goose	,,	1	0	0	9
Large duck	,,	0	9	0	8
Duck	,,	0	8	0	6
Crow	,,	0	4	0	4
Miniature	,,	0	5	0	4

BROWN SABLE BRUSHES.

IN GERMAN SILVER FERRULES, AND POLISHED HANDLES.

VERY FINE QUALITY.



No.			s.	d.	No.			s.	d.
1	Round or flat	each	0	7	4	Round or flat	each	1	2
2	,,	,,	0	9	5	,,	,,	1	3
3	,,	,,	0	11	6	,,	,,	1	6

RED SABLE BRUSHES.

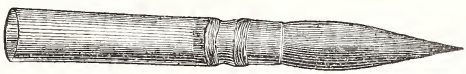
IN GERMAN SILVER FERRULES, AND POLISHED HANDLES.

VERY FINE QUALITY.

No.			s.	d.	No.			s.	d.
1	Round or flat	each	0	10	4	Round or flat	each	1	9
2	,,	,,	1	1	5	,,	,,	2	0
3	,,	,,	1	4	6	,,	,,	2	3

CAMEL HAIR BRUSHES.

Large Swan Quill Camels - - - - - - - 4d. each.



Small Swan Quill Camels - - - - - - 3d. each.

Extra Small Swan Quill Camels - - - - - 2d. each.

Full Goose Camels - - - - - - - - 2d. each.

FRENCH CAMEL HAIR BRUSHES.

			s.	d.
A	Small Crow - - - - - - - - -	each	0	1½
B	Crow - - - - - - - - -	,,	0	1½
C	Duck - - - - - - - - -	,,	0	2
D	Large Duck - - - - - - - - -	,,	0	2
E	Small Goose - - - - - - - - -	,,	0	2
F	Goose - - - - - - - - -	,,	0	2
G	Large Goose - - - - - - - - -	,,	0	3
H	Swan, No. 1 - - - - - - - - -	,,	0	8
I	,, 2 - - - - - - - - -	,,	1	0
J	,, 3 - - - - - - - - -	,,	1	4
K	,, 4 - - - - - - - - -	,,	1	8
L	,, 5 - - - - - - - - -	,,	2	5

FRENCH CAMEL HAIR IN TIN.

FLAT OR ROUND.

	s.	d.		s.	d.
No. 1 - - Each	0	3	No. 4 - - Each	0	6
,, 2 - - ,,	0	4	,, 5 - - ,,	0	7
,, 3 - - ,,	0	5	,, 6 - - ,,	0	8

SKETCHING UMBRELLAS.

	Cane Ribs. Each. £ s. d.	Paragon Frames. Each. £ s. d.
Made of Brown Holland, or Jeannette, length of ribs 28½ inches - - - - - - -	1 4 9	1 8 6
Ditto, with Fan Joint, length of ribs 28½ inches -	1 7 9	1 11 6
Made of Brown Holland, &c., length of ribs 32 inches	1 6 3	1 10 9
Ditto, with Fan Joint, length of ribs 32 inches -	1 9 3	1 13 9

With Bamboo Sticks, 2*s.* 3*d.*

PORTABLE SKETCHING EASEL, IN CASE.

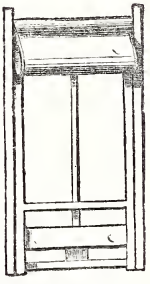
			s.	d.
Ash, 5 feet or 6 feet	- - - - - - -	each	9	9
Mahogany, or Walnut-Wood,	5 feet - - - - - -	,,	12	6
,, ,,	6 ,, - - - - -	,,	14	0
,, French polished,	5 ,, - - - - -	,,	17	3
,, ,,	6 ,, - - - - -	,,	19	0

THE GERMAN SKETCHING SEAT & EASEL COMBINED.

ADAPTED FOR EITHER OIL OR WATER-COLOUR SKETCHING.

Price £1 each.

THE EASEL, OPEN.



CLOSED.

The same principle has been adapted for the use of Ladies, and is equally serviceable and portable. Price £1 13s. 0d. each. With extra strong leather seat, 3s. 9d. additional.

KNAPSACK EASEL.

Similar to the German Easel, with the addition of a waterproof case and straps. The interior has sufficient space to contain the requisites of a walking tour. Price £2 9s. 6d. each.

SQUARE SEAT, SIMILAR TO THE ABOVE ILLUSTRATION,

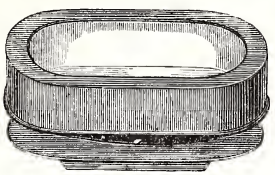
Without the Easel, Price 11s. 9d. each. Extra strong seat 3s. 9d. additional.

JAPANNED WATER BOTTLES.

FOR CARRYING A SUPPLY OF WATER FOR SKETCHING, WITH CUPS TO FIT ON THE PALETTE OR BOX.

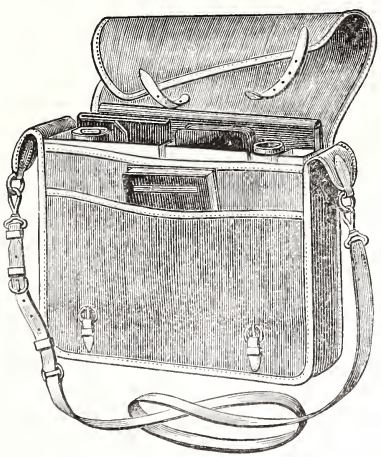
			s.	d.
No. 1.	JAPANNED	WATER BOTTLES AND CUPS .. .. .. each	2	9
,, 2.	,,	MIDDLE SIZE DITTO .. .. ,,	3	0
,, 3.	,,	LARGE SIZE DITTO .. .. ,,	3	6
,, 4.	,,	OVAL DITTO, PLATED INSIDE .. .. .. ,,	5	3
,, 5.	,,	DITTO, DITTO, LARGER .. .. ,,	6	0
,, 6.	,,	DITTO, DITTO, IMITATION, PLATED INSIDE, SMALL ,,	3	9
,, 7.	,,	,, ,, ,, LARGE ,,	4	0
,, 8	,,	,, ,, ,, FLAT ,,	4	0

RIMMED DIPPER,



TO PREVENT THE WATER SPILLING, 1s. 9d.

TOURISTS' SKETCHING BAGS.



MADE OF SATEEN, AND ARRANGED TO HOLD SKETCHING BLOCK, COLOUR BOX, WATER BOTTLE, SKETCH BOOK, BRUSH POUCH, ETC.

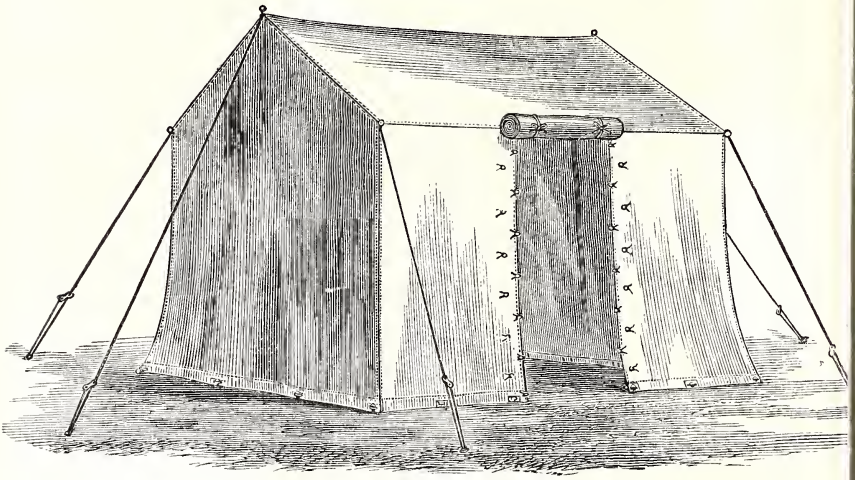
		s.	d.
IMPERIAL 8vo.,	11 inches by 8 inches .. .. each	16	6
IMPERIAL 6mo.,	15 ,, 8 ,, ... ,,	18	9
ROYAL 4to.,	12½ ,, 10 ,, ... ,,	18	9
IMPERIAL 4to.,	15 ,, 11 ,, ... ,,	20	3

GEORGE ROWNEY & CO.'S

PORTABLE TENTS,

FOR

SKETCHING TOURS, PIC-NICS, OR SUMMER EXCURSIONS.



The advantages of these Tents, consisting of their portability and light weight when packed, and their strength and spaciousness when pitched, are much appreciated by artists.

SIZE OF SMALL TENT WHEN SET UP .. .. .. 4 FEET SQUARE, 7 FEET HIGH.
,, ,, ,, PACKED .. 4 INCHES BY 4 INCHES, 4 FEET 4 INCHES LONG.
WEIGHT, ABOUT 12 LBS. PRICE, INCLUDING CASE, £3 3s.

SIZE OF LARGE TENT WHEN SET UP .. .. 7 FEET BY 4 FEET 6, 7 FEET HIGH.
,, ,, ,, PACKED .. 5 INCHES BY 5 INCHES, 4 FEET 6 INCHES LONG.
WEIGHT, ABOUT 20 LBS. PRICE, INCLUDING CASE, £3 18s.